PAKISTAN'S TRADE POLICY AFTER DOHA DEVELOPMENT AGENDA: PLACING SUSTAINABLE DEVELOPMENT AT THE CENTER

By

Ahmad Mukhtar

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
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Abbreviations

CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CEC	Commission for Environmental Cooperation
CTE	Committee on Trade and Environment
DSB	Dispute Settlement Body
ETPI	Environmental Technology Promotion for Industry
FAO	Food and Agriculture Organization
FCCC	Framework Convention on Climate Change
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
ISO	International Organization for Standardization
MEAs	Multilateral Environmental Agreements
MFN	Most Favored Nation
NGO	Non-governmental Organization
PPMs	Process and Production Methods
SD	Sustainable Development
SPS	Agreement on Sanitary and Phytosanitary Measures
TBT	Agreement on Technical Barriers to Trade
TED	Turtle Excluder Device
TRIMs	Agreement on Trade-Related Investment Measures
TRIPs	Agreement on Trade-Related Aspects of Intellectual Property Rights
TSD	Trade and Sustainable Development
TTSID	Technology Transfer for Sustainable Industrial Development
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environmental Program
UPOV	International Convention for Protection of New Varieties
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

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This research paper has been prepared in order to fulfill the thesis requirements for the Masters in Public Policy at KDI School of Public Policy & Management, Seoul, Korea.

I would like to give all credits to Professor Park Hun Joo who guided me all the way starting from inception of the idea to putting it in black & White. I studied the subjects of Political Economy and Democracy & Public Policy from Professor Park and found myself miles ahead on the road of knowledge and quest after that.

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Dedicated to:

My Parents….always praying for me…

1. Introduction

1.1 Research question

The main purpose of this thesis is to understand and examine the implications for Pakistan of clauses 31, 32 and 33 of the Doha Declaration (Box 1), which pertain to the relationship between trade and the environment. It is predicated on the very practical understanding that given the commitments Pakistan has made—not only in Doha, but also in signing various WTO and Multilateral Environmental Agreements (MEAs)— the country needs to maximize the advantages and minimize the adverse consequences of these commitments. The Doha Declaration is, in fact, perfectly suited to this end, as the three clauses represent both the challenges and opportunities for Pakistan. The intent of this thesis is to understand in greater detail what the challenges posed by the first two clauses are, and how they can be mitigated, and what the nature of the opportunity presented in the third clause is, and how it can be capitalized upon.

However, there is a larger context for the thesis. It includes:

a. the reality of the growing importance of environmental issues in the international trade regime, both in the form of trade disputes and subjects of discussion in policy circles;

b. the evolving definition of sustainable development[1]—which includes not only the environment but also other key policy goals, namely poverty eradication and human development—as an integrated policy objective of Southern countries, and its relationship between international trade and;

c. the long-running engagement between the North and the South over the dimensions and scope of globalization;

d. the multiplicity of global institutions, organizations, and regimes that have emerged to govern the process of globalization; and

e. the rise of knowledge-based production as an integral and defining feature of globalization, and its implications both for the North-South divisions and the tripartite tension between global regimes on trade, environment, and development.

Approach of Thesis

The approach of the thesis merits clarification since this is not intended only to be an academic thesis. On the one hand, the research is broad-based, aimed at providing a guidance document to facilitate government, private sector and civil society to formulate their policies. This is worth emphasizing: the study is a guidance document; it is **not** intended to present policy prescriptions or actions. On the other hand, the paper is also focused in at least three ways; it is intended to be:

[1] The now-standard definition of Sustainable Development was coined by the WCED, popularly known as the Brundtland Commission, as "development that meets the needs of the present generation without compromising the ability of future generations to meet their needs."

- **contextual**: uses specific cases to unpack the broader conceptual and policy issues, thus indicating the direct impacts of policy and drawing lessons for future decisions;
- **pragmatic**: based on the understanding that Pakistan has entered in certain commitments which it must fulfill and is bound by particular global trends which it must follow;
- **solution-oriented**: recognizing that within global constraints there is adequate room for Pakistan to define the terms of its own engagements in a way which meet its domestic policy goals as a Southern country, particularly for poverty eradication.

Chapters 2 to 4 of the thesis analyze Clauses 31, 32 and 33 of the Doha Declaration respectively, clarifying their implications for Pakistan on the basis of recent experience. This is supported by a case study on ***"Environment Impact and Mitigation costs of Cloth and Leather exports from Pakistan".*** Chapter 5 builds upon this analysis to present broad guidance on an optimal policy stance for engaging in the post-Doha world.

The main argument of this thesis is that the winning long-term strategy for Southern governments lies in an investment in systems that will enable their producers to break into the high-information segments of the market and compete with high-end producers.

To this end, sustainable development and the knowledge economy are presented as bridges between the policy communities of trade and environment, and as suitable concepts that can help Pakistan achieve its own policy goals. The principal recommendation is that Pakistan should take a pro-active stand in placing Sustainable Development (SD) at the center of trade policy and trade discourse. This is supported by three other broad-based recommendations:

- *To develop a base and a process for on-going impact assessment of trade liberalization;*
- *To develop dynamic SD-centered positions in future negotiations; and*
- *To build capacity to adapt to changing situations.*

1.2 Backdrop to Doha Development Agenda (DDA)

In the past, most developing countries opposed the inclusion of environmental issues in trade negotiations on the grounds that these could form the basis of a new protectionism by the North. In particular, while many countries have ratified a number of MEAs, they did not feel comfortable in allowing the MEAs to provide a lever for such protectionism. Yet, environmental issues have emerged in other forms, including such noted cases as the shrimp-turtle and the tuna-dolphin disputes, as well as through such mechanisms as TRIPS, eco-labeling, and GATS. The Doha agreement brings these issues into clear focus, and challenges developing countries to ensure that their engagement furthers their long-term policy goals, particularly for poverty eradication in the post-Doha world, when environmental issues are increasingly being mainstreamed in the trade agenda.

Box 1 – Trade and Environment in the Doha Declaration

31. With a view to enhancing the mutual supportiveness of trade and environment, we agree to negotiations, without prejudging their outcome, on:

(i) the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs). The negotiations shall be limited in scope to the applicability of such existing WTO rules as among parties to the MEA in question. The negotiations shall not prejudice the WTO rights of any Member that is not a party to the MEA in question;

(ii) procedures for regular information exchange between MEA Secretariats and the relevant WTO committees, and the criteria for the granting of observer status;

(iii) the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.

We note that fisheries subsidies form part of the negotiations provided for in paragraph 28.

32. We instruct the Committee on Trade and Environment, in pursuing work on all items on its agenda within its current TOR, to give particular attention to:

(i) the effect of environmental measures on market access, especially in relation to developing countries, in particular the least-developed among them, and those situations in which the elimination or reduction of trade restrictions and distortions would benefit trade, the environment and development;

(ii) the relevant provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights; and

(iii) labeling requirements for environmental purposes.

Work on these issues should include the identification of any need to clarify relevant WTO rules. The Committee shall report to the Fifth Session of the Ministerial Conference, and make recommendations, where appropriate, with respect to future action, including the desirability of negotiations. The outcome of this work as well as the negotiations carried out under paragraph 31(i) and (ii) shall be compatible with the open and non-discriminatory nature of the multilateral trading system, shall not add to or diminish the rights and obligations of Members under existing WTO agreements, in particular the Agreement on the Application of Sanitary and Phytosanitary Measures, nor alter the balance of these rights and obligations, and will take into account the needs of developing and least-developed countries.

33. We recognize the importance of technical assistance and capacity building in the field of trade and environment to developing countries, in particular the least-developed among them. We also encourage that expertise and experience be shared with Members wishing to perform environmental reviews at the national level. A report shall be prepared on these activities for the Fifth Session.

Source: WTO Fourth Ministerial Declaration at Doha, Qatar, November 2002

Simultaneously, the agreement draws attention to the very policy goals of Southern countries—often summarized by such terms as sustainable development or human development. The traditional approach of Southern countries is to focus on a single goal of the negotiations: market access. The philosophy is that market access determines exports, exports determine economic growth, and economic growth determines other important policy goals. In this approach, natural resources play a secondary role, mainly as raw materials for supporting the growth process. Thus, any policy or agreement that places limits on the rights of developing countries to use these resources is viewed as potentially harmful to the growth process.

However, if the overall policy goal is defined more broadly to include not only environmental conservation, but also poverty eradication, basic human needs (health, education, and civic services), and social equity, the direct relationship assumed to exist between various goals and instruments becomes weaker or even disappears. This raises a number of key questions on the appropriate policy stance with regard to international trade.

Box 2 – The North-South Debate on SD: History in Perspective

The international legal regime that forms the backdrop to multilateral agreements on environment (MEAs) and development is interesting for two reasons: a) it points to the gradual convergence of international law in environment and development towards sustainable development; and b) it brings out, in sharp contrast, the South-friendly nature of many MEAs and hence the reason for their opposition by many Northern countries. In practical terms, this backdrop anticipates the development of a single, umbrella international treaty on sustainable development.

The story begins with the **Universal Declaration of Human Rights, 1948**. For the first time ever, human rights were brought into the international legal arena, subject to international debate and systems of dispensing justice. The Declaration was not legally binding, but formed the basis for the legally binding UN Covenants on Human Rights, 1966, and set a precedent for "soft" law to be mainstreamed internationally.

This was followed by an equally visionary **Resolution on the Declaration on the Granting of Independence to Colonial Territories and Peoples, 1960** (popularly known as the Decolonization Resolution). The resolution, for the first time, declared that colonization was against the fundamental principles of human rights and against the interests of peace, and also held that "all peoples have the right to self-determination". Importantly, the Decolonization Resolution opened the door for the first international environmental treaty, the **Treaty on Permanent Sovereignty Over Natural Wealth, 1962**, which established the principle of permanent sovereign rights of nation-states over their biological resources. Ironically, these gains, fought for so diligently by the South, are in danger of being reversed under some elements of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights. This is precisely why the charge of "colonialism" has been placed by some critics on the WTO era.

In 1972, developing countries sought to strengthen earlier global gains at the UN Conference on the Human Environment. The resultant **Stockholm Declaration on the Human Environment, 1972** reflects this dedication, and Article 21 specifically echoes the Treaty on Permanent Sovereignty, 1962 in ensuring the rights of states to "exploit their own resources pursuant to their own environmental policies." At the same time, Stockholm was the first instance where environment and development were united, in Principle 8 of the Preamble. Stockholm was also a watershed in highlighting the importance of equity in international law: the Declaration stressed the obligations of "industrialized" countries to make efforts to reduce the economic gap between themselves and the developing countries, through technology transfer, financial and technical assistance, and fair pricing.

The spirit of these declarations persisted in the global negotiations through the subsequent decades. For example, the negotiations leading up to the **Rio Declaration on Environment and Development, 1992** were based on the principles that environment and development are inter-related; inter and intra-generational equity are both important; poverty alleviation is fundamental to sustainable development; developing countries need special treatment; and fair trade is essential. However, none of these are legally binding instruments, and the rhetorical gains made by the South are not translated into practice. On the one hand, the North has not lived up to the commitments implied by these agreements; and on the other hand, the South has not made sufficient number of pro-active moves towards achieving or even defining its own framework for sustainable development.

the MEAs represent by and large what might be called an *international ethical regime*; most of the agreements pertain to broad principles, which are meant to be pursued through the *national* policies of sovereign states.

This is a major reason for the overt opposition between the trading and environmental regimes. It percolates through a variety of institutional and individual systems that separate the two regimes. However, the concerns of the South with regard to a closer relationship between the two regimes cannot be understood without recognizing a basic and inescapable congruence between them. As Konrad von Moltke (2001) has reminded us, "The need to manage and protect the environment is itself a powerful force promoting 'globalization'…. This has given rise to the paradoxical situation where some of the most vocal opponents of economic globalization are passionate advocates of a process of globalization of economic management" (p. 4). In other words, the concern is that the South's irreducible position on national sovereignty would somehow get compromised if the globalization of environmental management took the form through which economic globalization has been institutionalized in the WTO.

But this raises a basic conundrum. The main justification for a sovereignty-based environmental regime is the willingness and ability of nation-states to pursue the objectives to which they express allegiance in international agreements. In the absence of an overt and visible commitment to sustainable development by Southern governments, the pressures will continue to mount for the globalization of the environmental regime as well. This could turn out to be far more inimical to Southern interests than the proposed linkage between the WTO and MEAs.

There is another and perhaps even more significant source of concern. This is that the process of globalization has dramatically reshaped the global system of production, distribution, investment, and growth. Production is organized around global commodity chains; these chains encompass a geographical dispersion of production, multiple patterns of industrial structure and technological management, and a global system of governance. Value added, profitability, and growth potential is determined not so much by the natural resource content as it is by the "knowledge and information" content of the product. This content includes the reliable information on product and process, in which consumers are interested; and this in turn depends on such things as robust and reliable institutions for certification, labeling, disclosure, and standardization. Finally, R&D institutions as well as advertising and communication capacities are essential for the enhancement of the information content.

Several authors have pointed out that the single most significant source of wealth in the modern economy is no longer the control of natural resources—although natural resources remain important—but rather the access to and control of information and knowledge; we are living in a knowledge-based economy. Yet, the developmental agenda of most Southern governments has not engaged meaningfully with this transformation. In particular, if this transformation were taken seriously, the focus of the development program would shift from supporting and subsidizing access to natural resources towards enabling domestic producers to have preferential access to knowledge and information. Such a strategy would, on the one hand, draw attention towards knowledge-producing institutions—the higher education system, research and development activities, and institutions that enable producers to remain abreast of and influence consumer needs,

technological developments, and policy formulation; and on the other hand, lead to the reformulation of a robust and meaningful capacity building agenda.

This provides the backdrop of the approach taken by this paper. This approach takes as its starting point the existing policy stance towards the development agenda, and consequently towards the agenda on trade and the environment. As such, it does not question the centrality of economic growth or market access in the current disposition. Instead, it goes beyond the current situation by asking how the world has changed in recent years—especially because of Doha development agenda, but more generally because of the far-reaching impact of globalization—and how the country can best position itself to take advantage of emerging opportunities and minimize the chances of adverse impacts. These two trends help keep track of the very different dynamics of the global trade and environmental agendas. Whereas the first is in the realm of instrumental politics, in which each country has to determine how best to advance its national interests, the second is still in the realm of ethical politics, in which the important step is to maintain a visible and credible commitment to agreed collective goals.

Very concretely, I would argue that a slight shift in stance is needed in both these areas. First, in area of the trade agenda proper, there needs to be an explicit recognition of the fundamental changes that are taking place in the global economy, and consequently of the changes that need to be introduced in the underlying development agenda; in particular, the developmental interests of the country have to be protected on the basis of access to knowledge-based resources—which enable producers and exporters to compete effectively in the dynamic segments of the global economy—and not exclusively on ensuring access to natural resources. This shift in orientation brings out a number of areas in which a sophisticated strategy would enable the country to benefit even from the current disputes over trade and the environment.

Second, in the area of the environmental agenda, the country has to make sure that the environmental agenda helps rather than hurts the developmental and equity goals. This requires an overt commitment to the ethical agenda that underlies multilateral environmental agreements. We have labeled a commitment to this ethical agenda under the rubric of sustainable development. A credible commitment to sustainable development enables a country to ensure that its development agenda is not jeopardized by an externally imposed definition of environmental conservation or social equity. Furthermore, it enables the ethical stance on environmental conservation to be integrated with an equally important ethical stance on poverty eradication and social development.

Both of these shifts need to be supported by a proactive and substantially redefined agenda for capacity development. Hitherto, mainly donor countries and institutions have driven this agenda. However, given the role that capacity building can play in enhancing access to knowledge-based resources and thus in stimulating the development process, it is important that Pakistan develop a coherent and integrated strategy for capacity development. Besides the development and deepening of the national capacity for policy formulation and negotiations, there is also a need to invest in research and analyses of the impacts of various proposed measures, not only on market access, assessed in very static terms, but also on global competitiveness, vulnerability, and property rights. This means a continuous and sustained program of impact assessment research.

The bottom line is that the Doha Declaration comes at an opportune moment for Pakistan; it provides an opportunity not only to explore the various response options to the concrete agreements made at that forum, but also to reassess the long-term developmental agenda in the light of the two dimensions of globalizations that figure in Clauses 31-33 of the Declaration, namely trade and the environment.

1.3 The International Trade Regime

Background: The World Trade Organization

The WTO came into existence as a single institution on January 1, 1995, upon the conclusion of the Eighth Round of multilateral trade negotiations under the General Agreement on Tariffs and Trade. The WTO is made up a set of Agreements, all of which apply to all members in a "package deal". Its main functions are to oversee implementation and administration of Agreements to provide a forum for negotiation and to provide a dispute settlement mechanism.

The governing body of the WTO is the Ministerial Conference, composed of international trade ministers from all member countries, while the General Council is the executive body. It has a number of committees, including the Committee on Trade and Environment (CTE) and the Committee on Trade and Development (CTD), and councils, which work under the General Council on specific areas. A Dispute Settlement Body, composed of all members, oversees the implementation and effectiveness of dispute settlement; typically, each dispute is heard by a distinctly constituted panel, while a permanent Appellate Body acts as the final arbiter.

The principle behind the WTO is the establishment of a rules and negotiations-based global trading system that can discourage unilateral trade restrictions and thus enhance global trade. The 1994 Marrakech Agreement describes WTO's goals as: raising standards of living, ensuring full employment, ensuring large and steadily growing real incomes and demand, and expanding the production of and trade in goods and services. The Agreement however, qualifies that these objectives are to be achieved while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development and while seeking to protect and preserve the environment.

The establishment of the rules based system rests upon two main principle: the principle of national treatment, which requires that goods and services of other countries be accorded the same treatment as goods and services of your own country; and the principle of most-favored nation, which requires that if special treatment is given to the goods and services of one country, the same treatment must be given to the goods and services of all countries.

Most developing countries are completely in accord with the principles and stated goals of the WTO. Indeed, the WTO dispute resolution mechanism, which does not require positive consensus of all parties to pass a dispute decision but rather a reverse consensus of all parties to reject the dispute decision, actually favors the politically weaker nations that cannot mobilize support to lobby against a decision. The concerns of many Southern countries lie in two dimensions: implementation of the principles and opening up of trade barriers to developing country exports (many of which have a

competitive edge due to low labor and other costs), and the existence of loopholes that allow the North to dictate terms and conditions to the South by leveraging other incentives, such as development aid. The latter includes the provision that the WTO cannot force a country to change its internal laws to comply with a decision, although it can allow retaliatory sanctions or compensation for more trade in other areas. However, since Southern nations in reality do not have the political or economic "muscle" to impose retaliatory sanctions, their economies are generally much more vulnerable to the sanctions in the first place, and they have few alternative trading options to take advantage of other concessions.

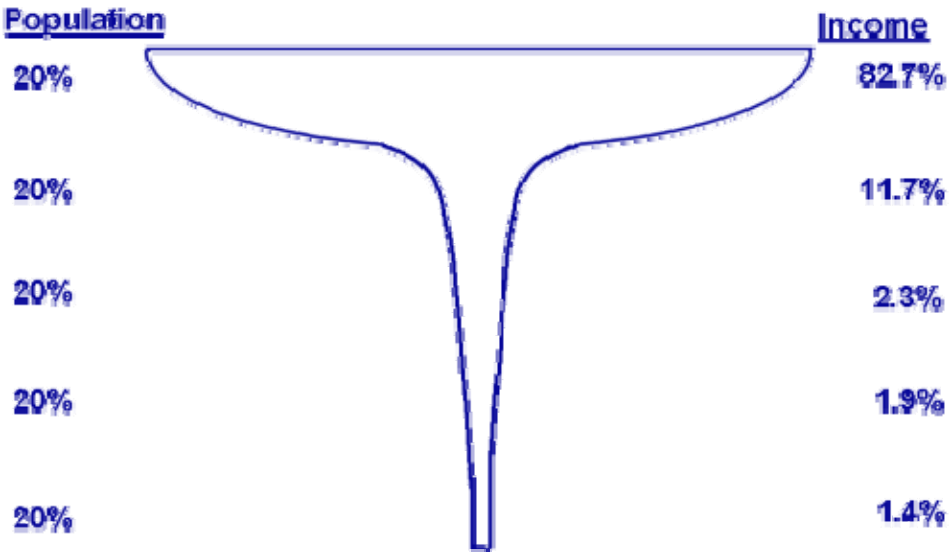
Another key concern of Southern countries is the actual negotiations process, so essential to the formulation and implementation of Agreements. The reality of negotiations has belied the myth in a number of cases, as many Southern countries simply do not have the physical or financial capacity to engage comprehensively in the negotiations process, particularly in the all-important part away from the table. Also, the negotiations have to-date been dominated by opaque procedures involving pre-discussed positions among OECD countries, through procedures such as the informal "Green Rooms" where closed-door and exclusive talks are held.

The WTO purports to provide a globally conducive environment for *all* countries to benefit from trade liberalization. While discouraging unilateral actions that would harm the weaker in a political tussle with the stronger, the WTO clearly intended to establish trade liberalization with rules, or *ordered trade*. The idea is that the benefits from any restrictions in trade, no matter how significant in the short run, have to be weighed against the potential long-term costs of such interventions.

Box 3 – Facts of Life

- World trade exceeded US$ 6 trillion in 2000, growing by a factor of 14 over the past 50 years, but 70% of the benefits of more trade have gone to the North.
- Least-Developed Countries, with over 10% of the world's population, have a 0.3% share in world trade, down from 50 years ago.
- In 1950, the ratio of income of the richest fifth of the world's population to that of the poorest fifth was 1:30; by 1989, it was 1:60, and in 2000, it was 1:80.
- Trans-National Corporations, headquartered in the North, control over 70% of world trade and 80% of global foreign investment.
- While the average world income exceeds US$ 5,000 per year, over 1.3 billion people across the world live on under US$ 1 per day (*Haq's Champagne Glass*, below).
- The world's three richest people have a combined income greater than the GDP of 48 of the least developed nations put together.
- Global carbon dioxide emissions have quadrupled in the past 50 years, although developing countries, such as Pakistan, remain considerably below the average emissions per capita.
- One quarter of the world's fish stocks are depleted, while a quarter of the world's known mammal species are dangerously close to being extinct.
- By 2030, with present trends, two-thirds of the world's population will live with "water stress", at less than 1,000 liters of water per year.
- Although global de-forestation has slowed down, most developing countries continue to exploit their forest resources unsustainably; Pakistan has the world's second-highest deforestation rate.

Mahbub-ul-Haq's Champagne Glass of Inequality



The philosophy underlying the WTO is that an ordered trade system not only leads to increased world trade but also creates benefits shared by all trading partners. This forms the basis the present phase of globalization through import liberalization and enhanced export earnings, which lead to lower prices and increased efficiency in domestic economies, benefiting both consumers and producers. An implicit assumption is that these benefits will lead to economic growth and services for human development.

However, the theory as well as the practice is increasingly being challenged by evidence from developing countries. The principal argument is that international trade is not an end in itself, but rather a means to broader social goals: economic growth, poverty eradication, and social development, and environmental conservation— in short, sustainable development. In fact, over the second half of the twentieth century, international trade expanded more than 14-fold, and global incomes over five-fold, the level of inequality in global incomes increased by an unprecedented amount (Box 3). For countries such as Pakistan, trade liberalization would be justified only if it meant more equity, less poverty and better conservation of shrinking natural resources.

1.4 The International Environment Regime

The institution of the WTO, following from multilateral trade negotiations, paralleled an initially un-related phenomenon, the emergence of a regime of multilateral environmental agreements (MEAs), many of which contain explicit trade provisions or implicit implications for international trade (see Box 9, Chapter 2). The MEAs regime, although not dealing specifically with international trade, contains an implicit leaning and

policy interventions, including trade restrictions. In particular, it takes as natural not a regime of free trade, but a regime of regulated trade, and seeks to promote *good trade*, that prevents harm to, or actively protects, the natural resource base. The acceptance of the need for an MEA regime stems from the same roots as the need for an international trade regime: to develop a binding set of rules that can deter harmful unilateral actions. Details on the tension between the trade and environmental regimes are provided in Chapter 2. However, this is a useful point to summarize the major developments that have led to the Doha Agreement.

There are over 200 multilateral environmental agreements most of which do not contain any provisions to curtail or promote international trade specifically. Importantly, each MEA has its own set of signatory parties, some of which overlap although a number of which do not. About twenty or so Agreements do contain some reference to international trade, seven of which are of key importance and have been ratified by Pakistan (details in Box 4).

The implementation of MEAs is complex and varies from country to country and agreement to agreement. In general, however, there is a single governmental department or ministry responsible for implementing and monitoring progress on a particular treaty. In Pakistan, overall implementation of Pakistan's multilateral environmental agreements lies with the Ministry of Environment, Local Government & Rural Development. The key MEAs are all handled by the Ministry, typically with "desks" or "cells" for each agreement.

However, Pakistan's environmental policy and legal framework is not divided by Agreements, as indeed it shouldn't be. The internationally acclaimed National Conservation Strategy provided the overall policy thrust for conservation after the Rio Summit. The NCS attempted to provide a broad framework for policy and action in environmental conservation, but also identified specific projects in fourteen core areas of conservation. It did not, however, link these to wider sustainable development goals, or with international trade policy.

Box 4 – Key MEAs Signed by Pakistan

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1975: aimed at ensuring that international trade in specimens of wild animals and plants does not threaten their survival (www.cites.org). Pakistan's principal obligations are to restrict the import and export of listed species of fauna and flora mentioned in Biodiversity Action Plan 2000. A range of legislative measures are recommended by the CITES secretariat and IUCN for implementation.

Vienna Convention on Substances that Deplete the Stratosphere Ozone Layer, along with the Montreal Protocol, 1987: about the reduction of Ozone depleting substances such as chlorofluorocarbons (CFCs), carbon tetrachloride and halons. The Ministry of Environment assumes sole responsibility for implementation of the provisions of the Protocol. An Ozone Cell has been established within the Ministry with the financial assistance of Multilateral Fund of the Montreal Protocol (www.environment.org.pk).

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1992: with the objectives of: 1) minimizing the generation of hazardous wastes as close possible to the source of their generation: 2) ensuring the environmentally sound management and disposal of hazardous waste: 3) preventing pollution from those wastes which are generated and: 4) minimizing the transboundary movement of hazardous wastes.

Convention on Biological Diversity, 1992: aimed at the protection of habitats, species and genes for future use (www.biodiv.org). 155 nations' singing indicated their intention to form a global alliance to protect diversity, to shift to sustainable modes of resource use, and to make the necessary policy, economic and managerial adjustments to guarantee that the benefits to be gained from the use components of biodiversity are equitably shared across local, regional and global societies.

UN Framework Convention on Climate Change (FCCC), 1992, along with the Kyoto Protocol, 1997: deals with a complex issue, having enormous potential economic impacts. The principal strategy of the FCCC is to change the pattern of future investment in favor of activities that generate less greenhouse gases. The Kyoto Protocol distinguished between those countries with greenhouse gas limitation commitments and those without. Although neither the FCCC nor the Kyoto Protocol includes trade measures, it is highly likely that the parties, in fulfilling their Kyoto obligations, will adopt trade-restrictive policies and measures (www.unfccc.int).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC), 1998: aimed at creating a system of notification to the international trade and transport of many goods domestically banned or severely limited. The convention allows developing countries to restrict the import of certain substances if they feel a need to do so. The Convention is based on Prior Informed Consent, a procedure that "helps participating countries learn more about the characteristics of potentially hazardous chemicals that may be shipped to them, initiates a decision making process on the future import of these chemicals by the countries themselves and facilitates the dissemination of this decision to other countries" (www.chem.unep.ch/pic). The aim of the participatory system is to promote a shared responsibility between trading countries to protect human health and the environment from the harmful effects of certain hazardous chemicals being traded internationally.

Cartagena Protocol on Biosafety to the CBD, 2000: addresses trade in most forms of living, genetically modified organisms and the risks it may present to biodiversity. It creates an advanced informed agreement system for such organisms to be introduced to the environment, and a less complex system for monitoring those intended to be used for animal consumption. The Protocol sets out a procedure for countries to decide whether to restrict imports of such goods, acting on the Precautionary Principle. A temporary inter-governmental committee governs the Protocol at the moment until the first Conference of Parties, yet to take place (www.biodiv.org/biosafety).

Trade Provisions in MEAs

The seven MEAs listed above, and most of the others with minor trade conditions, have two different types of provisions that impact on international trade: tariff and non-tariff based containment or restriction of trade in certain goods and services; *and* the creation of market-based trading conditions that promote environmental conservation.

After a mid-term review of the NCS in 2000, it was agreed that the NCS would be replaced by another sustainable development strategy, either in the form of a second NCS, or through the National Environment Action Plan. There remains, however, a major gap in terms of a central location for environmental conservation in national planning.

Overall policy guidance in environmental concerns is formally provided by the Pakistan Environmental Protection Council, headed by the chief executive or prime minister of the country (or his/her nominee). PEPC, however, meets only infrequently, and is only distantly involved in accountability of Pakistan for its multilateral environmental commitments under various agreements.

The Pakistan Environmental Protection Act, 1997 provides the legal umbrella for environmental action. The Act introduced the requirement for environmental assessments prior to approval of any development projects, and set up a network of Environment Protection Agencies and tribunals. However, the Act does not deal specifically with either MEAs or international trade.

In sum, implementation of MEAs falls primarily within the scope of work of the Ministry, and neither policy nor legal support is adequately provided. Furthermore, there is no clear exchange with the Ministry of Commerce regarding the trade provisions within the various MEAs that Pakistan is a party to.

1.5 Linkages between Trade and Environment

The precise linkages between international trade and environment are multiple and complex, and can be understood in at least four dimensions: perspectives, physical impacts, laws and policies, and institutions.[2]

Contrasting Paradigms

The discourse around international trade can be divided into three distinct and conflicting perspectives, which capture the essence of the differences within and between the North and the South (Box 5). The *trade perspective* argues that international trade leads to greater economic growth for all, thus automatically benefiting human development. The *environmental perspective* maintains that policies not specifically aimed at conservation are unsustainable, and that international trade is fundamentally harmful to the natural resource base and hence the long-term prospects for human development. The *development perspective* (propounded by many Southern countries over the past decade and emerged as a proposal for a Development Box at Doha) holds

[2] These well-understood linkages are described in detail in UNEP and IISD, 2000. This is, of course, only one framework by which to understand the trade-sustainable development linkage, but a particularly useful one for the Pakistan context and for some of the recommendations that follow in this paper.

that international trade is in reality tilted to favor the "haves" over the "have-nots", and that Northern countries must provide clearly specified allowances for less-developed countries.

Much of the debate on trade and sustainable development, presented typically as a North-South divide, centers around the potential for the use of environmental measures by Northern importers to thwart developing country exports. This is paralleled by a general concern that provisions in many MEAs could be used to trump the WTO rules working for the benefit of developing countries in the form of freer trade. Pakistan has consistently held to this position, officially expounded in the Ministerials in Seattle and Doha, fed further by the perception of zero benefits from the integration of environment into the WTO discourse.

BOX 5 – Perspectives on Trade and Environment

The Trade Paradigm

- Trade creates the wealth that could be used to increase human well being.
- But most national governments answer too directly to national industries, and will try to preserve domestic markets for these industries, keeping foreign competitors at bay.
- In doing so, governments make their citizens worse off: domestic firms become inefficient, domestic consumers pay higher prices, and more efficient foreign firms are shut out.
- The best protection is a strong system of rules against such behavior, such as WTO rules, by which all countries abide.
- Even after signing such agreements, countries will look for loopholes. Banning or restricting goods on environmental grounds may be one such loophole.
- Trade can actually be good for the environment, since it creates wealth that can be used for environmental improvement, and the efficiency gains from trade can mean fewer resources used and less waste produced.

The environmental paradigm

- The status quo seriously threatens the earth's ecosystems.
- But most national governments answer too directly to national industries, and will try to protect them against "costly" environmental demands.
- In doing so, governments make their citizens worse off: domestic firm make profits, but the public subsidizes them by paying the costs of environmental degradation.
- One way to avoid these problems is a strong system of rules spelling out clearly how the environment shall be protected, at the national and international levels.
- Even after such rules are in place, governments and industry will look to scuttle them. Trade rules forbidding certain types of environmental regulations may be one way to do so.
- Trade means more goods produced thus in many cases more environmental damage. The wealth created by trade will not necessarily result in environmental improvements.

The development paradigm

- Over one-fifth of the world's population live in absolute poverty, most of them in developing countries, and the gap between the rich and poor countries continues to widen. Developing countries' top priority should be reducing that poverty and narrowing that gap.
- Openness to trade and investment may be key way to do so, by increasing exports, though the links between openness and economic growth are not automatic.
- But rich countries protect their industries with subsidies, special trade rules and tariff systems that hurt developing country exports.
- The best solution is strong set of multilateral rules against such behavior, but current WTO rules are too deeply influenced by the powerful trading nations, and liberalization has selectively benefited sectors of interest to developed countries.
- Over time, as such behavior is outlawed by trade rules, rich countries will look for new ways to keep foreign competition out of their markets. Banning or restricting goods on environmental grounds may be one of those ways.
- Demands that poor countries comply with rich country environmental standards are unfair, particularly if they are not accompanied by technical or financial assistance. Priorities differ; for example, in many poor countries clean water is paramount. And rich countries often caused most of the environmental damage in the first place.

Source: UNEP and IISD, 2000.

From Article XX of the General Agreement on Tariffs and Trade, through the Agreement on Trade-Related Aspects of Intellectual Property Rights, and up to the Agreement Sanitary and Phytosanitary Standards, environmental conservation and protection is given explicit importance in WTO. The WTO Committee on Trade and Environment was formed in 1995 to examine issues central to the sustainability of international trade. The environment has become a progressively more important and hotly debated topic in the WTO discourse. At the Ministerial Conference held in Seattle in December 1999, environment was one of the nails in the coffin of talks to begin another round of trade negotiations.

Physical Impacts

At a very basic level, international trade (at the very least in goods) is based upon production, which is directly related to the state of natural resources. In countries such as Pakistan, where agriculture is of such vital importance, the environment is a key factor in determining how competitive a country's exports are. Such physical effects (directly affecting economic factors) can be further understood in terms of:

Product effects: the nature of the products being traded (exported or imported) has a direct impact on the environment, and hence the potential for sustainable development. Thus, for example, Pakistan's import of chemical fertilizers (1,760,500 metric tons in 2002-2003, up from 306,000 metric tons in 1970-71) has a direct negative effect on the quality of groundwater and food produce, thereby impacting negatively on health and human productivity. Similarly, trade in some goods have a positive impact on the environment, such as the import of pollution-reduction plants for the cement industry in Pakistan, or the export of organically grown mangoes.

Scale effects: international trade, and more specifically the liberalization of trade, can affect the environment by expanding or shrinking the quantum or efficiency of economic activity. Increases or decreases in either can affect the environment directly by simply enhancing the scale of existing physical impacts, but can also have a more indirect impact by changing the allocation of resources to conservation. For Pakistan, the scale effects are minimal, with exports standing at an average of about 15% of GDP, unless the volume of trade increases substantively. Similarly, the volume of trade is not a prime force for efficiency improvements, apart from a few industries that are solely dependent on export.

Structural effects: Lastly, international trade liberalization can affect a change in the structure of a domestic economy, by orienting it towards "trade-able" exports and generating a reliance on "necessary" imports. In line with the popularly expounded theory of "comparative advantage" any given country's economy may be oriented towards more or less polluting industries, while a change in consumer demand patterns of an importing country may force an exporting country to re-orient its production sector in either direction. In the case of Pakistan, the situation is mixed with regard to the principal

exports, agricultural produce, textiles and leather: growing consumer demands for "green" food in the North is encouraging a shift towards more eco-friendly agriculture, while the comparative advantage of cheaper labor in the manufacturing sector is encouraging a shift towards more polluting industries (for which environmental mitigation may reduce their competitive edge).

Laws and Policies

One of the fundamental factors responsible for "chilling" North-South relations on trade and sustainable development is the potential for conflict perceived between the legal and policy regimes governing international trade and the environment. As mentioned earlier, the international trade regime is increasingly being governed by the World Trade Organization, although hundreds of bilateral agreements are also in effect and there are numerous countries still outside the ambit of the WTO. However, it is largely expected that sooner rather than later, the WTO rules and principles will govern global trade. The global policy and regime for environmental conservation, however, is not unified in a single institution, being governed rather by a collection of about 200 multilateral and thousands of bilateral agreements. In addition, there are a host of other global regimes that govern domestic policies and laws with regard to human development, primarily stemming from the United Nations framework but still not unified institutionally as the WTO is.

Trepidation stems from the fact that environmental and developmental legal and policy requirements increasingly dictate how a country must organize its economic structure, while international trade law is increasingly dictating how countries must formulate their environmental and developmental laws so as to be compatible with the goals of trade liberalization. With these overlapping requirements it is inevitable that conflicts may emerge nationally and internationally. For example, both WTO Agreements and MEAs grant the right of discrimination based on environmental quality, but while the WTO SPS Agreement confers the right to set standards on an international body, most MEAs confer this right on individual countries, while setting a minimum standard. At the same time, the WTO recognizes only product-related Process and Production Methods (PPMs) as a valid basis for discrimination, while environmentally it makes little sense for a distinction based on the end use of the product – the concern of most MEAs is how the product was made, not whether a "clean" product can be distinguished in its usage from a "dirty" one.

Such differences between WTO and MEAs arise out of differences in perspective, core principles and dispute settlement mechanisms, and are discussed in detail in section 2.3.

Institutional Arrangements

The key fact that the international trade regime is governed by a single entity, albeit an inclusive membership organization, and that environmental management is governed by a host of MEAs, each with its own unique implementation arrangement, is a recipe for conflict.

In addition, the linkage between trade and environment is fundamentally affected by the driving principles behind each set of implementation arrangements. While the

MEAs rely essentially on complete transparency and as wide a level of public participation as is practically feasible, the WTO places conceptual restrictions on both the availability of information and participation in decision-making. The case of dispute settlement is notable, as the briefs submitted by the parties involved are typically restricted, and civil society participation in WTO is severely restricted. It is quite probable that the institutional arrangements of the trade regime have an impact on the outcome of environmental conservation by determining the efficacy of the institutional arrangements for environment.

For Pakistan, the issue is of a very practical nature, as the different locations of institutional arrangements dealing with trade and MEAs creates an almost un-bridgeable disjoint. While the trade and environment institutions also have different global accountabilities, creating one level of concern, the goals are perceived to be very different for each at the national level; the result is a severe lack of communications and information exchange, particularly with regard to sustainable development as a bridge to join the two communities.

The framework outlined above is only one way to understand trade-environment linkages. Another filter is the value chains approach, which examines the value addition and impact on the environment at each stage of a commodity's production and trade. Such an approach yields similar conclusions, but with greater emphasis on the impact on the global competitiveness of a nation and its producers.

1.6 In Sum: Trade, Environment and Sustainable Development

While trade liberalization, governed by the WTO, and environmental conservation, governed by a set of MEAs, generates distinct and occasionally conflicting demands on parties, a country such as Pakistan needs to balance both in its search for long-lasting development. The concept of sustainable development (SD) introduced by the World Commission on Environment and Development in 1987, offers a suitable umbrella under which to perform such a delicate balancing act. It is a potential bridge between these three perspectives. Certainly, a Pakistan-centric view would be to integrate the goals of poverty eradication, economic growth and conservation. This requires an inter-meshing of the three perspectives.

A quick search on the World Trade Organization website leads to twelve substantive links for "sustainable development", each leading to detailed research outputs or to further links. Only seven years after the World Commission on Environment and Development popularized the concept of sustainable development, the preamble to the Agreement establishing the WTO (the Marrakech Declaration of 15 April, 1994) declared its objective to be "expanding…production and trade… with the objective of sustainable development, seeking both to protect and preserve the environment…consistent with (members') respective needs… at different levels of development."

The Doha Declaration also recognizes the importance of sustainable development in clause 51[3], although there is no explicit mention of what the term refers to, nor any detail on how it is to be integrated. The typically weak language in the text offers no clear guidelines for developing countries seeking to engage with WTO on a sustainable development platform.

If indeed Pakistan is to make its way down a global one-way street, we need to sit up and shift gears or step aside.

[3] The section mandates the Committees on Trade and Environment, and Trade and Development to "act as a forum to identify and debate… the developmental and environmental aspects of [future] negotiations, in order to help achieve the objective of having sustainable development appropriately reflected."

2. New Negotiations in Trade and Environment

In this and the two chapters that follow, I would examine the change in the situation produced by the Doha Declaration through a clause-by-clause analysis. Rather than approach this as an abstract discussion, I have structured it in the form of concrete cases or examples. These examples illustrate the manner in which issues have been approached in the WTO—and therefore, how they are likely to be approached in the future—and also to place in context the underlying conceptual and practical problems. This chapter analyzes the implications of Clause 31 (Box 6). This clause pertains to an agreement to start negotiations on three areas: relationship between WTO rules and the trade obligations under MEAs; regular information exchange between WTO committees and MEA secretariats; and reduction of barriers on environmental goods and services. The South had earlier resisted the start of such a process of negotiations because of fears that it could lead to environmental conditionalities or might otherwise create competitive disadvantages for Southern exporters. We have approached the analysis by using the experience of the shrimp-turtle dispute (Box 7); this dispute brings out the various aspects of the conflict between trade and environment as well as that between the WTO and the MEAs.

Box 6 - Doha Declaration, Clause 31

With a view to enhancing the mutual supportiveness of trade and environment, we agree to negotiations, without prejudging their outcome, on:

(i) the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs). The negotiations shall be limited in scope to the applicability of such existing WTO rules as among parties to the MEA in question. The negotiations shall not prejudice the WTO rights of any Member that is not a party to the MEA in question;

(i) procedures for regular information exchange between MEA Secretariats and the relevant WTO committees, and the criteria for the granting of observer status;

(ii) the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.

We note that fisheries subsidies form part of the negotiations provided for in paragraph 28.

This is followed by Chapter 3, which focuses similarly on Clause 32—namely the agreement to work on existing issues before the Committee on Trade and the Environment (CTE) of the WTO, including market access, TRIPS, and eco-labeling. This analysis is also approached through practical examples and illustrations. Finally, the implications of Clause 33 are analyzed from the perspective of how to move forward.

2.1 The WTO and the MEAs

There are fundamental differences in the philosophy, perspective, institutional mechanisms, and approach between the WTO and MEAs. The WTO is premised on the belief that international trade leads to economic growth, which brings prosperity to everyone, and that any benefits that may flow from barriers to the free flow of goods and services across national borders has to be weighed carefully against the costs of lost output and productivity; consequently, the WTO has tried to set up an *ordered* global regime, in which governments agree *not to use* domestic policies to obstruct trade except

on justifiable grounds. The MEAs on the other hand, have generally led to commitments by countries to broad environmental principles, and to *use* government policy to realize these principles. Except possibly in the case of the UN Framework Convention on Climate Change (UNFCCC), these have not begun to move in the direction of establishing a global regime; rather, these can at best be described as elements of a global moral regime—i.e. a joint commitment to an agreed set of principles—to be implemented through independent action by sovereign governments.

Background: Multilateral Environmental Agreements (MEAs)

The 1972 United Nations Conference on the Human Environment, Stockholm initiated the process of global environmental management and created the United Nations Environment Program. This was followed up most comprehensively two decades later at the United Nations Conference on Environment and Development, Rio de Janeiro. The need for an environmental legal regime was expressed continuously, and developed as a set of multilateral agreements centered on particular environmental issues. The evolution of a non-unitary set of agreements is based on an important recognition: that the knowledge, constituency, urgency and implementation arrangements for different environmental issues are radically different. Thus, the requirements for protecting and preserving the Earth's ecosystems are very different from the requirements of reducing carbon dioxide content in the Earth's atmosphere. Implementation arrangements, in particular, are diverse and typically complex. As the agreements grew in number and depth, however, a common set of goals and principles has emerged as the foundation for global environmental management.

The aims of most MEAs today are built around the definition of sustainable development offered by the World Commission on Environment and Development. While some MEAs specifically state their purpose as being directly beneficial, in a defined manner, to sustained human development, others maintain this as an implicit principle in the achievement of strictly environmental conservation goals. The stated aims of MEAs are different by necessity, ranging from reduction of the carbon dioxide content in the Earth's atmosphere, to reduction in the loss of genetic, species and ecosystems diversity, to protection of oceans from oil pollution, to the barriers to the transport of hazardous waste material across national boundaries.

The **core principles** of MEAs include prevention, precaution, participation, subsidiarity, responsibility, and equity. *Prevention* is more effective and cheaper than environmental cure, and in some cases it is the only option; that is, action must be based on the possibility of damage. The *Precautionary Principle*, widely recognized in natural sciences, states that lack of conclusive evidence does not justify inaction and, in fact, necessitates pro-active measures. *Subsidiarity* recognizes the fact that global impacts are due to local causes, and that responsibility needs to be devolved to the lowest level that can effectively respond. *Common but differentiated responsibility* requires the burden of environmental remedy and further prevention to be shared according to the national responsibility for the creation of the problem in the first instance. Similarly, the *Polluter-Pays-Principle* requires those who create a problem to be the first ones held responsible to fix it. *Openness* requires both transparency and participation in decision-making. *Intra- and inter-generational equity* is based on essential rights to be respected, both presently and for the future.

On the principle that coercion has not generally led to sound environmental policies or positive environmental impacts, most MEAs do not contain **dispute settlement mechanisms**. Most operate on the basis of consent, while specific disputes are typically handled under regional or bilateral agreements. Consent typically requires active participation and free exchange of information, a feature of most MEAs designed to reduce the possibility of conflict.

The South generally has few reservations about the principles of MEAs, particularly as it is equally affected by the global phenomena for which it is not responsible, and it is most affected by the pollution due to massive global relocation of manufacturing between the 1950s and 1990s. The concern is typically with the use of MEAs by the North for its own direct economic benefit, but not when the North is required to "clean up". Another concern is that sustainable development tends to be overlooked in many cases where "purely" environmental concerns are being debated, at the cost of the single most important aspect of Southern policy: poverty eradication.

Clause 31 and MEAs

In Clause 31, the Doha Declaration recognizes the importance of the nexus between the WTO and the MEAs, and hence implicitly the tension between the two regimes, arguably as a result of the events in the last Ministerial in Seattle. However, the clause itself contains two important "cushions" for the trade perspective:

1. The clause does not indicate in any manner the sort of relationship that might develop between the two regimes; it only mentions the goal as "enhancing the mutual supportiveness of trade and environment" without the umbrella of sustainability or the development perspective.
2. There is an explicit statement that future negotiations will focus only on the rights and obligations of countries that are members of both WTO and a particular MEA. On the one hand this offers an escape clause for countries that have not ratified the relevant MEAs (e.g. the US has not ratified the Cartagena Protocol of the CBD or the Kyoto Protocol of the UNFCCC); on the other hand, it leaves open the possibility of different rules for different countries, thus violating one of the cardinal principles of the WTO, namely a unitary implementation structure.

The clause also deals with the same problem, but with an understanding that regular information exchange is needed between MEAs and the WTO secretariat for long-term solutions. The second phrase of the clause, however, is not innocent, as it goes to the root of principles of implementation in the two regimes. The WTO has traditionally been reluctant to open up participation in various processes (some Southern countries maintain that in practice, if not in letter, participation is even discouraged, such as by setting up a hectic schedule of negotiations that developing countries do not have the capacity to keep up with). MEAs, however, are based on open participation, and include an inclusive system of accreditation for civil society as well.

2.2 The Shrimp-Turtle Case: Trade and Environment in Perspective

The potential for conflict between trade and environment has been tested in a number of celebrated legal cases, including the tuna-dolphin case, the shrimp-turtle case;

disputes over attempts by transnational corporations to patent processes using *basmati* rice, and *neem* extract; and bilateral negotiations over measures to protect against the health impacts of production processes and materials (e.g., the banning of materials containing azo dyes).

Box 7 – The Shrimp-Turtle Case

Background: Thousands of sea turtles drown every year when caught in shrimp nets. The US requires its shrimp fishers to use protective technology called Turtle Excluder Devices (TEDs), a trap door by which turtles can escape from shrimp nets. In 1989, the US Congress banned import of shrimp caught without TEDs.

How the WTO got involved: Pakistan, India, Malaysia and Thailand filed a complaint against the United States in 1996, claiming that the U.S. Turtle Shrimp Law violated international trade law by barring the importation of their shrimp and shrimp products. USA was accused of violating GATT article XX, which does not allow any arbitrary or unjustifiable discrimination between countries.

What the WTO said: The WTO ruled in 1998 against the United States. Among the findings: the United States was discriminating by giving Asian countries only four months without any technical support to comply with the Turtle-Shrimp Law, but giving Caribbean Basin nations three years with technical assistance.

The result: The United States revised its guidelines on the import of shrimp, changing both the method and the schedule by which it evaluated how well foreign shrimpers were doing at protecting sea turtles from drowning. The first beneficiary was Australia, which was allowed under the revised guidelines to export shrimp to the United States.

How the United States sees it: Even though the United States lost the case, the Clinton administration claimed a partial victory after the Appellate body ruling in 1998 because the WTO recognized the validity of the U.S. Endangered Species Act. The administration claimed to have strengthened its protection for sea turtles in two ways: the National Marine Fisheries Service has increased its efforts to provide technical training to other countries in the design, construction and installation of TEDs, and the State Department has intensified efforts to negotiate an agreement on turtle protection in the Indian Ocean.

How Pakistan sees it: Although the case was won by the developing countries, the basis for judgment did not allow for the precedent intended. In fact many members of the trade policy community in Pakistan see the judgment as a loss, not least because of the loss to the sizeable shrimp industry in the country and because technical assistance for TEDs is still not widely available. More importantly, Pakistan is concerned about the precedent this sets, in that environmental standards have been implicitly accepted by the WTO as valid grounds for trade restrictions: the settlement only rejected the differential treatment of Asian versus Caribbean countries by the USA.

How environmentalists see it: Environmentalists said that United States weakened its law protecting shrimp turtles, and created a loophole already being exploited by Australia and Brazil. The second WWF *civicus amicus* brief showed that the panel ruling of 6 April 1998 included major 'legal and interpretative errors' in assessing the 'environmental exception' under GATT Article XX. Asian environmentalists are caught in a dilemma. On the one hand, they are concerned that the sea turtle is indeed in danger of extinction and deep-sea shrimp fishing without TEDs does contribute seriously to their decimation. On the other hand, they are bothered greatly by the US move to apply its domestic law to activities that take place outside US jurisdiction. The US ban, to them, seeks to achieve a desirable objective an undesirable approach: unilateralism (Bello, 1997). For Asian environmentalists, restrictions ought to be applied not only to shrimps harvested in the wild but also to those that are produced in environmentally damaging aquaculture farms, but this should be done according to clear-cut rules of multilateral environmental agreements that are negotiated among counties. Moreover, trade restrictions should be paralleled by positive moves that compensate the affected producers and provide for technology transfer that would assist them to shift to more sustainable Production Process Methods (PPMs).

The bottom line that emerges from an analysis of these cases is that while the WTO rulings did not provide complete satisfaction to environmentalists, they have by and large accepted environmental arguments as a basis for policy making. From these rulings, it appears likely that the final ruling would not have been very different were the dispute to have been placed before an MEA panel. Nevertheless, the basis for the ruling would in all likelihood have been different, and this might the major source of concern. In particular, while the WTO resolution of the issues has derived from a single, over-arching principle, namely that a national policy should not discriminate between goods produced in various countries, the MEAs are premised on the alternative principle of

national implementation, in which discrimination is not only tolerated but often welcomed. The negotiations process over the linkages between WTO rules and trade obligations under the MEAs has to contend precisely with this contrast in underlying principles.

These inherent tensions are amply demonstrated in the famous shrimp-turtle case, in which Pakistan was a party to a dispute filed with the WTO (Box 7). Analysis of this case, which remains one of the most extensive instances of an environmental dispute at the WTO, can shed light on the simple question: what would have happened had the case gone to the relevant MEA, in this case the Convention on Biological Diversity? If the outcome were to be completely different, that would be evidence of a conflict in uniting both regimes; if the outcome were to be roughly the same there may be enough hope of harmonious unifying of two in the interest of sustainable development goals.

The background of the case is provided in Box 7. Briefly, the dispute arose over the 1989 decision by the US Congress to ban the import of shrimp caught without the use of turtle exclusion devices (TEDs).[4] In 1996, Pakistan, India, Malaysia, and Thailand filed a complaint that the US law violated GATT article XX, which prohibits arbitrary or unjustifiable discrimination between countries. The WTO initially ruled against the US in 1998, on the grounds that the US law discriminated between the petitioners and the Caribbean countries, since the latter had been given a longer adjustment period and provided with technical assistance. The US revised its guidelines on shrimp imports, changing both the method and the schedule by which it evaluated how well foreign shrimp exporters were doing in protecting sea turtles. In consequence, the WTO Appellate Body revised the earlier ruling in October 1998, and accepted the US plea that it was justified in imposing restrictions to protect "exhaustible natural resources". A feature of the initial ruling as well as the subsequent reversal by the Appellate Body is that environmental arguments were accepted by the WTO as grounds for restriction of trade, based on GATT Article XX, sections (b) and (g).

The primary problem in comparing the WTO Dispute Settlement and a potential resolution under the CBD is that while environmental measures are clearly spelled out in WTO Agreements (Box 8), international trade provisions are less clear in MEAs. Of the few MEAs that do spell out trade measures, most of them are targeted at very specific items, which are not the bone of contention in any case, such as trade in endangered species, the transport of hazardous waste or disposal and retrieval of objects returning from space. The CBD itself is not clear about specific measures to restrict trade.

What *is* clear is that the two regimes (MEA and WTO) use very different principles and perspectives to approach the same problem. The WTO ruled on the grounds that the US was not justified in imposing a restriction on Asian countries that it was imposing differently on Caribbean countries (violation of the most-favored nation principle). At the same time, the precedent was set for future rulings in favor or environmental protection measures to restrict trade.

[4] TEDs are small aluminum frames inserted into shrimp fishing nets. They are neither technologically complicated nor very expensive. The main obstacle in adapting to the new policy might have been social in nature. In countries where shrimp fishing is a small-scale operation managed by illiterate or semi-literate rural fisherfolk, introducing innovations is not a simple matter. This itself can create a competitive advantage for countries, whose industry is organized along different lines.

The CBD and other environmental agreements are premised on the argument that policy needs to be used proactively to protect endangered species. Consequently, in the present case, the argument would mean that it is legitimate to ban any trade or domestic consumption of shrimps that contributes unnecessarily to the death of sea turtles. Although the initial decision may have turned out to be the same, the body of case law developed would be sufficiently different to have set a precedent for future cases. Furthermore, any possible appeals procedure in the CBD or other MEA would not have overturned the initial ruling, as happened in the WTO.

In order to explore the issue further, it is important to highlight an additional point, namely that the perspective of sustainable development is not sufficiently integrated in the manner that this petition was presented or defended. Pakistan and the other appealing countries did not argue from an integrated sustainable development perspective. This would have required an understanding of the impacts of the case on poor fisher folk engaged in shrimp fishing, and the broader economic importance of sustaining marine life. In such an argument, Pakistan and it co-plaintiffs may well have placed the following arguments at the center:

1. there is no dispute on the need to install turtle exclusion measures in order to preserve rare marine turtles;
2. shrimp fishing in Pakistan is done largely by independent fishers, who are generally poor, illiterate (or semi-literate) and unorganized – even though they are members of the coherent rural communities. This makes the task of introducing new technology more complicated for both social and practical reasons. It also complicates the task of providing credit for purchase of this technology.
3. the economic case for shrimping, particularly for poor fishing communities but also as an integrated part of the developing economy of Pakistan (including the industry associated with industry);
4. the fact that Pakistan, and other developing countries, simply do not have the financial resources to make TEDs a necessary feature in shrimp-nets;
5. restrictions against non-TED shrimp fishing are inherently discriminatory against developing countries at large, and not against particular countries in view of 3 above; *and*
6. all countries are willing to comply with TED-shrimp farming within a specified time frame, provided there is adequate support from those who can give it to ensure that the adequate knowledge and technology are transferred and that monitoring is tied in with the transfer of adequate technology.

The case illustrates the fact that “green protectionism” exists even under the WTO umbrella. The only manner in which MEAs would have made this a stronger threat would have been a threat by an importing country to apply a law exclusively against other countries. In either case, however, a sustainable-development centered argument would have been more compelling. In the absence of such an argument, the CBD could have ruled that trade restrictive measures were completely justified, and that they should be applied to all the shrimp farming industry regardless of the country of origin or the nature of shrimp farmers.

The concrete lesson for Pakistan in this case is that whatever regime such a dispute is referred to, the country would have to start developing TED capacity in its shrimp farming industry, both to allow its shrimps to be imported and to prevent a rare species from extinction. Thus, regardless of the potential problems of bringing WTO and MEAs into sync (and the case demonstrates that there are problems in principles and perspectives), the general lesson for Pakistan is that both regimes would require significant capacity building in production in areas with overlaps. In particular, the case points to the need for well-researched capacity development and provision of information to relevant communities. There is a need for improvement in the industrial and agricultural sectors to cope with emerging, well-organized environmental responsibilities to cope in the international market.

The argument used in the WTO ruling (that the US was differentiating between Asian and Caribbean countries and hence Article XX of GATT was being abused) does not allow for any targeted discrimination in the future. However, the ruling does create an opening for environment-related standards to be imposed under GATT, Article XX, as long as the country applying it does so uniformly. Under such circumstances, Southern producers, with fewer capacity building resources at their disposal, would be at a disadvantage to Northern producers (domestic or exporters) who have the capacity to adapt or the means by which to develop such capacity.

The Shrimp-Turtle case, thus, brings out the potential problems in uniting MEAs and WTO, as per Article 31 of the Doha Declaration, in all dimensions: perspective, principles and institutional arrangements. However, the important result for Pakistan is that its own sustainable development goals (both freer and fairer trade) will involve substantial capacity building.

It is worth mentioning here that capacity building itself is a vague term, as discussed in chapter 4. Turtle Excluder Devices themselves are fairly inexpensive and simple, consisting of a roughly square meter of aluminum that should cost no more than Rs. 300 (US$ 5) per piece to produce. However, the “social technology” to introduce, replicate and adapt to the physical technology is more troubling, particularly for the majority of coastal shrimp farmers. At the same time, while monitoring mechanisms “on the boat” are virtually impossible to assure, there may well be requirements for such measures “on-shore”. Once again, though, the fact that such measures may now be introduced reflects a significant *potential* threat to other exporters.

As soon as sustainable development is introduced as a long-term policy objective, it raises an important issue, namely assessment of the impact of specific agreements on the policy goal. Presently, developed countries have initiated a number of studies to build a decent framework for such assessment. However, these frameworks tend be partial and fragmented in character. In other words, they look separately at the impact on natural resources and the environment, social equity and poverty, and economic growth.

Developing countries have not, by and large, initiated any efforts at assessment or at building the appropriate framework for assessment. As a result, it becomes difficult for policy makers as well as negotiators to take a strong position on disputed issues on the basis of its sustainable development impact. Furthermore, most mainstream assessments by Northern researchers do not start from a pro-poor framework, in which the

vulnerability, coping capacity, and livelihood strategies of the poor become the basis for assessing policies or international agreements. Nor do they take a pro-development approach, in which the position of Southern producers in the global value chain is taken as a staring point for the assessment.

If the South is to play a significant role in global negotiations, it needs to ensure that such assessments take place regularly within the South, and also that the assessment framework used globally is the one that places the policy objectives of the South at its center[5].

2.3 Tensions between MEAs and WTO Agreements

Perspective	Freer trade always increases wealth, economic growth and, hence, well-being of all those involved in more trade. However, some restrictions on trade need to be placed in carefully defined places to protect human and environmental health from being harmed by trade.	Human well-being is inextricably linked to environmental health, and freer trade sometimes harms the environment. What is needed is a targeted set of agreements that can pro-actively protect the environment, and liberalize or restrict trade as necessary.
Principles	Most-favored nation treatment National treatment No discrimination between "like" products that cannot be distinguished in their commercial use	Prevention Precaution Subsidiarity Common and differentiated responsibility Openness Polluter-pays Inter/intra-generational equity
Implementation Approach	Countries will protect their own limited interests, and compliance has to be enforced through uniform rules. This requires a single, strong enforcement and regulatory agency States subsume some of their rights to a global entity	Countries are sovereign actors and will define their own agendas in light of the greater common good. This requires trusting nations to formulate laws and policies for the greater good States retain their sovereignty
Institutional Implementation	Single implementing and monitoring entity (WTO) Governmental responsibility	Multiple institutions Governmental responsibility Maximum possible participation

[5] The impact of trade liberalization and WTO imperatives on Pakistan may be assessed from the perspectives of rights of Pakistani producers, their ability to cope with changes and their competitiveness in the global market.

	Limited participation Clearly identified and linked up domestic compliance	Clearly identified but not inter-linked mechanisms
Dispute Settlement	Clearly spelled out dispute resolution and appeal process Focus on settlement negotiations Reverse consensus supports the politically weaker parties indirectly	No clear or uniform mechanism

Box 8 – "Green" Provisions in the WTO

- GATT, Article III: the legal expression of the national-treatment principle, preventing discrimination between "like" products. However, the lack of clarity on what constitutes "like" products has environmental implications, as there is still a debate on whether products with different environmental impacts may be treated as different, and hence suitable for separate treatment.
- GATT, Article XI: prohibiting volume-based measures that can distort trade, such as quotas, import/export licenses and similar measures. This is in direct conflict with measures under some of the MEAs, for example the Basel Convention imposing licensing requirements for trade in hazardous materials.
- GATT, Article XX: the most explicit environmental provisions maintain that, under certain conditions, policies affecting trade in goods for protecting human, animal or plant life or health, and "relating to the conservation of exhaustible natural resources" are exempt from normal GATT disciplines. Such exemptions typically pass through a series of stringent tests.
- Agreement on Technical Barriers to Trade: specifies tariff and non-tariff measures to restrict trade, based on performance, environmental, health or other standards used by the producer. Typically, such standards are defined internationally, although a Code of Good Practice lists optimum standards.
- Agreement on Sanitary and Phytosanitary Standards: covers standards essential to protect humans, animals and plants from specific hazards associated with transportation. The Agreement specifies conditions under which it may be invoked and ground rules for defining the standards internationally, including a temporary provision for the Precautionary Principle.
- Agreement on Agriculture: defines the conditions under which environmental programs may be exempt from cuts in subsidies.
- Agreement on Subsidies and Countervailing Duties: specifies that subsidies be permitted (up to 20% of a firm's costs) for adapting to new environmental laws.
- Agreement on Trade-Related Aspects of Intellectual Property Rights: governments can refuse patent applications that threaten human, animal or plant life or health, or risk serious damage to the environment.
- General Agreement on Trade in Services, Article 14: policies affecting trade in services for protecting human, animal or plant life or health are exempt from normal GATS disciplines under certain, specified conditions.

Process and production methods (PPMs) are a central feature of the trade and environment debate at the WTO. The WTO distinguishes between

- *Product related PPMs*: resulting in products that can be distinguished in terms of their use, handling or disposal. The WTO allows countries to discriminate on the basis of product-related PPM, as long as the discrimination is maintained against local products and products from all countries and can be justified under some trade exception provided by an Agreement;
- *Non-product related PPMs*: resulting in products that can NOT be distinguished in their use, handling or disposal. The WTO does NOT allow countries to discriminate against products on the basis of a non-product related PPM, simply because it is not in favor of such a PPM, even if it makes the same discrimination against its own products.

The tensions between MEAs and WTO Agreements emerge from three distinct levels, as inferred from the hypothetical extension of the Shrimp-Turtle case: different perspectives on the manner in which to achieve the end result of "well being"; distinct, and occasionally conflicting, principles by which the two regimes are set up; *and* differences in implementation, enforcement and dispute settlement.

These differences need to be understood clearly for Pakistan to develop its position, after further careful consideration, on the MEA-WTO linkage issue.

Dimension	WTO Agreements	MEAs

case-by-case basis; *and* second beginning to identify capacity building needs immediately in all areas that might be sensitive to MEA application or could take advantage of MEA provisions. In the first strand, there is a need to advocate for the global and national integration of mechanisms with sustainable development as the defining goal, and for an exchange of information to that end, both globally and nationally. In the second strand, there is a need to develop indigenous research capacity.

Box 9 – Trade Provisions in Key MEAs

Key MEAs	TRADE PROVISIONS
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	**Article 4.1.(a) (b) (c):** Parties may only export a hazardous waste to another party that has not banned its import and that consents to the import in writing. **Article 4.2(g):** Parties can prevent the import of hazardous wastes if they have reason to believe that the wastes will not be managed in an environmentally sound manner. **Article 5:** Parties may not export hazardous or other waste to, or import from, a non-Party. **Article 6.3 (a) (b):** Waste movement may not commence until written consent is received
The Convention on International Trade in Endangered Species (CITES)	**Article II:** The species threatened with extinction must be subject to particularly strict trade regulation in order not to further endanger their survival and trade must only be authorized in exceptional circumstances. **Article III:** Trade in endangered species is only allowed in strict accordance with declared provisions. **Articles IV and VI:** Regulating and monitoring is provided for through permits, quotas and other restrictive measures.

Montreal Protocol on Substances that Deplete the Stratospheric Ozone Layer	**Articles 4.1 and 4.2:** Ban all trade in the substances defined as ozone-depleting between parties and non-parties. **Articles 4.3 and 4.4:** Specifies a phased implementation. **Articles 4.5 to 4.8**: Excludes technologies for the destruction of ozone-depleting substances **Article 4B:** Parties to implement systems for licensing and control of trade in ozone-depleting substances by January 2005.
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	**Article 10.2 and 10.4:** Parties can decide, from the Conventions' agreed list of chemicals and pesticides, which ones they cannot manage safely and, therefore, not import. Such decisions must be communicated to the Secretariat. **Article 11.1 (a) (b):** Exporting parties shall devise legislation to ensure compliance with consenting decisions. **Article 11.1 (c)**: Exporting parties shall advise and assist importing parties to "strengthen their capacities" to manage chemicals safely. **Article 12.1 and 12.3:** Exporting parties must provide adequate notice if export of restricted chemicals takes place. **Article 13:** When trade in controlled substances does take place, labeling and information requirements must be followed according to international standards.
Cartagena Protocol on Biosafety	**Article 6.2:** Recognizes the right of any Party to "subject all living modified organisms to risk assessment prior to decisions on import to set standards for contained use". **Article 10:** Parties may restrict the import of some living genetically modified organisms as part of a carefully specified risk management procedure. **Article 10.6:** Parties may use the precautionary principle to restrict trade of living modified organisms.
Convention on Biological Diversity	No direct mention of international trade restrictions of promotion.
Framework Convention on Climate Change	No direct mention of international trade restrictions of promotion. There is now, however, a move towards the promotion of trade in emissions credits, to reduce the balance of global emission.

Source: Various

2.4 Environmental Goods and Services

The final section of Article 31 refers to the possibility of expanding trade in environmental goods and services (EGS). This has been a long sought-for win-win scenario in the potential trade and environment conflict, allowing for trade liberalization along with environmental protection. Such products typically include technology (both *goods*, such as waste treatment plants, chemicals that can reduce waste content in particular processes, water-conserving machinery, etc. and *services*, such as consulting, techniques for re-use and disposal of pigments and dyes, etc.) for cleaner production. Qutub (2001) further divides EGS into preventive ("in-house" treatment) and curative ("end-of-pipe") measures.

This issue stumbles against a market block: the demand for EGS in the South (where it is most needed) does not match the price of such goods and services in the North (where it is most available). The way forward, it turns out, is for a demand for subsidized provision of EGS, support for capacity building to enable such services to be created within Southern countries, and their encouragement for developing an additional demand for such services from the North. Such a dynamic may well lower the price of these products both by making the technology available within the South, and by increasing the scale of production in the North as well as the South. At the moment, most of the clean production measures initiated by the private sector itself are for limited reasons and of limited scope.

Much of the effort in technology transfer to date has been in the form of grants. In Pakistan, grant-based projects such as the Environmental Technology Program for Industries and the Technology Transfer for Sustainable Industrial Development have managed to generate some momentum. This has been accompanied by growing civil society pressure to put into place cleaner production systems and comply with the National Environmental Quality Standards. Initially, there was some interest in donor countries to follow up on these projects with credit lines that would enable individual producers to obtain the requisite services from international sources. However, this interest does not seem to have been pursued actively by the Government of Pakistan.

The impact of this section of Clause 31 in the Declaration is, thus, limited especially in the context of the other provisions within the Declaration. One of the key concerns is the absence of an accepted definition of "environmental goods and services". It is quite possible under current trends that inherently biodegradable products (such as raw jute or cotton-based goods) can be qualified under this heading, thus benefiting developing countries from a number of angles. However, most developing countries are wary of such a step, because it would leave open an option to fully introduce Process and Production Methods (PPMs: Box 8) into the WTO mechanism. At the same time, leaving the issue open for continuous interpretation leaves open the chance that developed countries will push through import liberalization in services that can only marginally be considered "environmental".

Future negotiations will focus on exactly such a definition. The acclaimed newsletter *Bridges* (ICTSD, 2001) clarifies that the "spectrum of views in both the trade and environment communities appear to range from a *narrow definition* that would regard environmental goods as equipment or technologies required for environmentally

sound production of final goods and 'end-of-the-pipe' pollution treatment equipment, to *broader ones* based on environmental characteristics of the goods themselves and/or their production process."

This wide range is, again, a potential threat and opportunity for Pakistan, requiring a pro-active definition to be developed and advocated for in light of sustainable development imperatives. The likely starting point is the WTO Secretariat definition proposed in March 1998:

"The environment industry consists of activities which produce goods and services to measure, prevent, limit, minimize or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems. These include cleaner technologies, products and services which reduce environmental risk and minimize pollution and resource use although there is currently no agreed methodology which allows their contribution to be measured in a satisfactory way."

The broader view of EGS would include any good that would not have a negative impact on the environment, compared with "like" products that would. Such a broad view would have serious implications for Pakistan and for Northern countries. On the one hand, Pakistan does not have the capacity to move its nascent industry into "cleaner production", nor can it afford for Process and Production Methods (PPMs) to be made valid grounds for discrimination in WTO. On the other hand, it has a comparative advantage in agricultural products, which it could ask to be classified as "environmental goods" and take advantage of the reduced tariffs.

Likewise, the North would also be seriously tested with such a broad definition. Although it may allow it the freedom to apply environmental standards to restrict Southern trade and allow it enhanced market access in clean production technology, a broad view of EGS may also force it to accord preferential treatment to sustainably produced goods from the South, such cotton products.

At the moment, there is little scope for such a broad definition of EGS to be introduced into future negotiations, although some have voiced concerns in this regard. For now, it is most likely that a restricted definition of the term will be introduced, both because the North is not willing to take a chance on the implications and because the South has little capacity to take advantage of a broad-based definition. However, it is unlikely that liberalization will take place even under the narrow definition of EGS, because of market constraints of demand and supply.

Pakistan can take advantage of the present mood, and push for a restricted definition of EGS, as above. However, the convergence between sustainable development and trade trends globally, and the growing civic pressure domestically, mean that such a position cannot be held to for very long. There is, thus, a need to start giving indications for a "conditional agreement" to a broader definition of EGS, provided that its acceptance is made contingent to capacity building steps by the North. In a long-term perspective, such an option is also clearly desirable for Pakistan, as its own industry (including agriculture) is beginning to have severely damage human and environmental health.

Box 10 – Private Sector Initiatives for Clean Production

Lessons from the few initiatives taken by the private sector are relevant to Pakistan's import and export of environmental goods and services for sustainable industries. Some of the sporadic actions have been reported as being undertaken purely on moral grounds. In most cases, however, the driving forces for industry, reported by their own representatives (Arshad Zaman Associates, 2000), have been external. These include:

- In some cases, multi-national companies in Pakistan follow the rules of their home countries, which normally involve stricter environmental and social regulations. In a few cases, they also force their subsidiaries or related companies up and down the supply chain to follow those same rules;
- Large-scale national industries, particularly those geared towards exports, are now improving their businesses as pre-requisites for ISO 9000 or 14000 certifications. This certification is becoming a necessity for the export market even if it is largely ignored within the country;
- Regardless of certification requirements, exporting industries increasingly have to respond to a discerning export market. Consumers now, particularly in "developed" countries are more conscious of social and environmental standards of production than before. Clean industries stand a better chance of improving profits than sloppy ones;
- Consumer and local community awareness campaigns have also forced the private sector to sit up and take notice of environmental concerns. Residents in area plagued by industrial pollution are now mobilized by civil society and the experiences elsewhere to demand cleaning up processes.

Source: Arshad Zaman Associates, 2000.

3. A CASE STUDY OF PAKISTAN

Clause 32 of the Doha agreement singles out three of the more important issues on the agenda of the WTO Committee on Trade and Environment (CTE), requiring it to report on these issues at the next Ministerial Conference. These issues are market access, TRIPs, and eco-labeling. Following upon the previous discussion, I look at these issues from a perspective that places sustainable development at the centre. This perspective requires a review of the overall stance towards the issues, as well as the nature of policies that would best serve the national interest, and the type of support that would be required for the purpose.

The key question in this review is the need for the policy making process in Pakistan to come to grips with a fundamental shift in the global economy, a shift in which the source of wealth creation is no longer the direct control or processing of natural resources but rather the control and use of knowledge and information. This shift means that profitability and productivity depend to an unprecedented degree on the "information content" of products—including reliable information about product and process, information about consumer preferences, and information embedded in research and development. The bulk of Southern producers are concentrated in low-end production segments, characterized explicitly by a low-information content of the product. Many conflicts in the trade and environment arena can be interpreted in terms of the differential impact of policies on low-end producers—namely those producing output with low information content—and high-end producers, whose goods and services have high information content.

3.1 Environmental Measures and Market Access

Market access is at the heart of the debate over trade and environment. Traditionally, Southern governments opposed the introduction of environmental issues into trade policies because of fears that these would lead to the erection of barriers against Southern exports, which they would not be able to overcome without access to resources or technology. The celebrated cases listed in the previous section support this argument. For example, Pakistan lost at least two years of shrimp exports to the US because of the latter's unilateral policy, a policy that was in the end endorsed by the WTO Appellate Body's ruling on the Shrimp-Turtle case.

The market-access argument is a very potent one. An important counter-argument, namely that the actual impact of the introduction of such standards has been quite low—seems to miss the point. In the case of Pakistan, for example, the only detailed study was conducted by UNCTAD in 1996 based on 1993 data (cited in Qutub, 2001). This study estimates that in 1993 only US$317 million—or 5 per cent of the aggregate volume—of exports were "sensitive" to environmental measures. Even if one assumes that current ratios would not be significantly different—despite the massive increase in environmental awareness since then—the issue is quite different. The point is that it is not the actual impact but the potential impact that makes a different. For example, for Pakistan, the entire situation would change dramatically if environmental arguments were to be introduced by some country on cotton or cotton products, Pakistan's major export

commodity. The key issue is the capacity of Pakistani producers to cope with *potential* actions, regardless of whether these are undertaken under the WTO or the MEAs.

Thus, although the impacts have been minimal thus far, this does not minimize the need to be wary of the threat posed by application of environmental standards. However, such wariness could take a number of forms, including a continuous investment in the capacity of producers to respond to future threats; assessing a broad range of impacts produced by such measures; and enabling policy makers as well as producers to anticipate and overcome the problems rather than be dominated by them.

Given the direct relationship of market access to export promotion and therefore economic development, it makes sense to focus on this as a major indicator of the positive or negative impact of a proposed measure. However, this focus can take at least two very different forms. The conventional form, on which much earlier policies and negotiating positions were based, is to use this indicator virtually to the exclusion of all other indicators of economic or social development; this approach addresses neither the determinants nor the entire range of consequences of market access or the proposed measure. An alternative approach is to assess the proposed measure in terms of its aggregate impact on the prospects for (sustainable) social and economic development; and examine a variety of options that can be combined to overcome its adverse impacts while maximizing the positive spin-offs.

The apprehension…that non-tariff barriers to trade are being introduced in the guise of environment, child labor…[represents] a myopic vision by business, [which] will and can only lead to environmental disasters. A broader vision and an acknowledgment of the benefits, monetary as well as societal, are needed. The realization is needed that the issues that are being termed as a form of non-tariff barriers are essentially detrimental to the national economy and the survival of life as we know it…. Even if legislation by importing countries is not introduced, it is more probably that the individual importing companies, due to consumer pressure, will exert pressure for environmental compliance.
---Mahmood Ahmed, Vice-President, FPCCI, 1998

The first response is mono-focal in character; its only objective is to block any measure that threatens the market access of Pakistani products. The latter response is more nuanced. It asks:

(a) what is the impact of the proposed measure on an entire range of policy goals: market access, equity, environmental conservation, or poverty? ; and

(b) what kind of ancillary or supportive measures—e.g. capacity building, access to technology, community development—would help the country overcome the direct adverse impact on exports.

In the case of the shrimp-turtle dispute, for example, policy makers could legitimately have been expected to assess the aggregate impact of the US policy on the entire range of objectives: national economic development, the welfare of the fishing community, the shrimp population, the turtle population, and coastal resources in general. More importantly, it may have also been useful to explore a number of policy options that together might have led to win-win scenarios—e.g. those in which the capacity of the

local fishing community could have been enhanced to enable them to engage in sustainable fishing, thus achieving growth, equity, and environmental objectives simultaneously.

Failure to explore such options is resulting in an enormous "credibility gap", which impacts all other aspects of the negotiations (Najam, 2000). Northern governments and the environmental lobby claim that developing countries are simply not interested in applying necessary environmental standards—even when the trade impacts are minimal. This has reduced the ability of Southern countries to make negotiating gains in other fields, including implementation of past agreements by the North.

Finally, the reality of environmental considerations in international trade is that MEA or WTO measures are only one aspect facing Pakistani and other Southern exporters. At the moment, while few such measures are being legally enforced, producers have to contend with growing consumer awareness and preference for "cleaner" and "safer" goods. Whether the WTO enforces eco-labeling or not, and whether goods produced in an eco- or socio-unfriendly manner are passed through the importing borders or not, the test for the producer is the customer. The customer is, increasingly, demanding labels to know the history and the production process and the environmental implications of the good that s/he is consuming. There is a clear need for building capacity purely to remain competitive in an ever more informed and discerning market place.

Market Access: A Necessary but not a Sufficient Condition

Conceptually, too, the advocacy of increased market access is based on the assumption that increased exports will automatically lead to substantial economic growth which, in turn, will lead to significant human development (through the trickling down of the increased wealth at the top of the income bracket, and through increased public investment in social services). These assumptions have turned out to be incomplete and on occasion even misleading.

Recent evidence shows that the determining factor in economic growth is not the volume of trade but the pattern of trade. Thus countries that specialize in sectors where the global volume of trade is expanding will do better than those which are stuck in sectors with shrinking trade shares. Even in a single sector, different segments of commodity chain exhibit different properties.[6] Countries that do well economically are those that manage to graduate to more profitable and dynamic segments of the commodity chain. Certain segments of the production chain produce more "economic rents", or mark-ups per unit cost, than others. In the case of the cotton commodity chain, for example, value added, economic rents, and profitability are concentrated in retailing and marketing, in which profitability and growth are driven by specialization in ancillary activities: certification, labeling, advertising, and consumer management. In contrast,

[6] The commodity chain approach examines the entire production system from raw material to final retail product of a single commodity. For example, the cotton commodity chain stretches from cotton farming to ginning, spinning, weaving, finishing, garment manufacturing, and retail marketing of finished garments. The commodity chain approach looks at the entire production system as an integrated entity, in terms of the geographical dispersion of production, the technology and production process, and the system of governance of the chain. The last-mentioned is assessed in terms of the production structures in various segments of the chain; in particular, oligopolistic segments tend to be dominant in comparison with competitive segments. Excess economic rents also tend to accumulate in the oligopolistic segments of the chain.

cotton growing, ginning, and spinning activities are low value-added segments, in which growth takes place mainly through increased extraction of natural resources or linear expansion.

Thus, a winning strategy for a country is to seek to establish market access in the high-growth sectors, and in particular in the high-end segments of the high-growth products. The country should avoid getting stuck in the low-end segments of the market, or in shrinking sectors in world trade. The relevance of this observation to the issue of environmental standards is that these standards are generally used by Northern countries as a means of discriminating against low-end producers from the South, and thus providing a competitive advantage to high-end producers from the North. For Pakistan, while the policy process must seek to provide short-run protection to existing low-end producers, it would be extremely short-sighted to condemn them to survival in the low end of the market. A more far-reaching strategy is to use policy as well as negotiations to enhance the ability of its producers to enter into and compete in the high-end segments of the commodity chain.

Take the case of the shrimp-turtle dispute. At one level, the issue is simplicity itself; the dispute is between low-cost shrimp fishers from Pakistan and their high-cost competitors from the US. At another level, however, it is a dispute between producers who can reliably communicate their product and process measures to consumers—through certification, labeling, and disclosure—and those who lack the capacity for doing so. The former earn high economic rents because of this capacity; and their governments use the cover of environmental policy to further enhance the competitive advantage they accrue because of this capacity. The choice for Pakistan is either to concentrate on protecting the low-end market segment even if it knows that the earning potential of this segment will remain highly restricted; or to use every opportunity to enable these low-end producers to break into the high-end market, in which the earning potential as well as growth impact are enormous.

Breaking into the high-end segment is not easy; and nothing that is written here should give the impression that it is. It requires a concerted series of investments in such areas as certification, labeling, standardization, and disclosure—all areas in which Pakistan lags far behind other countries. More importantly, it requires an investment in the collective efficiency of producers by supporting producers' associations as well as the development of common norms, codes of behavior, and standards of conduct.

An alternative strategy, therefore, is to ensure that capacity building resources are made available from the global system for investment in the individual and collective capacities of low-end producers. The objective of such a strategy would be to enable low-end producers to break into and begin competing with the high-end segments of the commodity chain.

The demand for increased market access thus needs to be based on a proper understanding of the mechanisms by which this access would be most beneficial for the country. Pakistan's shrimp and fishing industry is a case in point: at the rate at which fishing (both by coastline communities and by deep sea trawlers) is being promoted, there will very shortly be a severe shortage regardless of whatever environmental measures are imposed by MEAs or the WTO. Clearly, if shrimp stocks diminish, so will the future

trade potential of Pakistan. Similarly, if the waste being dumped into the Arabian Sea leads to the degradation of the coastal mangrove ecosystem (in fact at one of the highest depletion rates in the world), it will not only reduce forest produce but also degrade the habitat for shrimps that Pakistan exports.

In other words, Pakistan has a choice. It can base its trade agenda exclusively on the maximum extraction of rapidly shrinking shrimp stocks (or natural resources in general); or orient it towards a forward-looking strategy in which the question is one of enhancing export revenues and growth stimulus from smaller volumes of shrimp exports—albeit with a much higher informational content. In fact, it is in the country's long-term interest to reduce the natural resource content and enhance the information content of its production and exports.

Pakistan can maintain its position on discrimination against developing countries generally, and can continue to demand capacity building (particularly through technology transfer) from the North (which has not delivered on prior promises). But it must develop alternative routes to capacity building and more globally compatible negotiating positions for the CTE to take to the Ministerial. Such positions must, again, be founded on the principles of sustainable development, and need to be focused on understanding more clearly what sorts of capacity building are needed to cope with emerging market access problems.

3.2 ENVIORNMENT IMPACT AND MITIGATION COSTS OF CLOTH AND LEATHER EXPORTS FROM PAKISTAN

Executive Summary

Pakistan, like many other poor Southern countries, is currently double minded. On one hand, it finds that the rich countries are very slow in implementing the Uruguay Round trade agreements in liberalizing imports, particularly in sectors such as textiles and agriculture which are of interest to Pakistan. On the other hand, the world trade scenario is changing, independently of the sway of the WTO, as governments and businesses respond to consumer preferences for ecological friendly production and consumption and set to impose environmental standards. Thus, even the goods currently being exported are increasingly being expected to meet stringent environmental standards.

Poor countries now feel that while it suited the North, they preached consumer sovereignty and confronted them with the "let the market decide" rhetoric. Now that several countries in the South have acquired comparative advantage in manufactured goods, the North is hiding behind environmental barriers to protect their industries, and forgetting the market ideology they preached.

The issue is not quite as simple as it seems. If standards are responding to consumer preferences in the North, then the market ideology still prevails, and northern consumers in effect chose to consume goods that are produced by cleaner methods rather than those which are cheaper. However, Southern countries may need to be wary of protectionist use of environmental standards by rich country governments rather than those dictated by the market. In such cases, they should lobby via the WTO to ensure that

the old time market rule of "consumers' sovereignty prevails", particularly now that this benefits the poor countries.

International justice notwithstanding, my research shows that there are good reasons for poor countries to want to meet the environmental standards being imposed by rich countries because the benefits of doing so for them exceed the costs. This argument is based on several premises. First, meeting environmental standards such as the ISO-14000 can ensure efficiencies and economies within the firm. Second, these standards have built into them a process of quality controls and efficient management and these may go a long way to winning and retaining export markets. Third, meeting environmental standards also represents a win-win scenario on a macro-economic level, since a cleaner environment would lead to a reduction in health care costs, health-related productivity losses, health-related working days lost and health related livelihood losses. Fourth, from a social justice perspective, this saving gets more weight, since the poor are the most vulnerable to environmental depredations. Fifth, my research for cloth production and leather tanning shows that, contrary to the view held in the South that the costs of mitigating environmental damage are very high; in fact mitigation costs are quite modest at both the macro and micro level.

The objective of this research was to estimate the increase in exports of cloth and leather and footwear, based on the Uruguay Round Agreement on Textiles and Clothing (ATC) and past trends, and identify the associated pollution and the benefits and costs of pollution mitigation. Textiles and leather are among two of the most polluting industries and, with in these industries, producing cloth and tanning leather are the most polluting processes. We selected the textile and leather industries because of their economic significance and their pollution impact. The textile industry ranks as number one in terms of exports, value added and employment. Leather ranks third in terms exports and, while it is not as significant in terms of value added or employment, it is the most polluting of all the industries.

I have tried to estimate the export related environmental impact of cloth and leather. Following that, we assessed the mitigation impact of using cleaner technologies in terms of reducing the scale of pollution and then assessed the cost of mitigation. One way of building a strong case for mitigation is to demonstrate that these industries are highly damaging to the environment and human, plant and animal life. Ideally, one ought to precisely quantify the cost in rupee terms. A reduction of such cost thus becomes the benefit of mitigation that can the be compared to the monetary cost of mitigation. Unfortunately, sine cost quantification is indicated how this is likely to increase due to the export related increase in production.

The main finding of this research is that, at current emission rates, the pollution impacts of the exports of cloth and leather and footwear are very large. However, the mitigation cost at the macro level of reducing the pollution load by up to 91 percent for

cloth production and 66 percent for leather tanning are much smaller the commonly considered to be the case in the South.

For textiles, BOD, COD and TSS are the main parameters for which current emissions are above local and international standards. The chemicals used in the textile industry are very toxic and corrosive and prolonged exposure poses a health risk.; The cotton dust is a health hazard since it can result in respiratory diseases. Other problems, resulting from the air emissions, include the pernicious odor and smog. The main problem results from the liquid effluents that are pumped untreated into drains that enter fresh water flows. This is not only a nuisance aesthetically, but also threatens aquatic life and only a nuisance aesthetically, but also threatens aquatic life and the use value of the water. Metals and compounds like chromium and phenol are carcinogenic and dyes like azo are both carcinogenic and allergy inducing . These effluents also pose a threat to inland and coastal fisheries and seepage into the water table means an entry to toxic chemicals into the soil and food chain.

For leather, the pollution load currently far exceeds national and international standards on all parameters. Leather is in this respect an even more hazardous industry. In addition to the problems of liquid effluents indicated for the textile industry, solid wastes contain chromium residues that can cause perforations and bronchial carcinoma from prolonged exposure. Poultry fed manufactures often buy wastes and this can result in the entry of chromium in the food chain. Tests have shown chromium residues in the poultry feed. The chromium and other metals in solid wastes also adversely affect plant growth. The hydrogen sulfide formed by the presence of sulfide in the effluent is highly toxic. Ammonia emissions cause irritation of the respiratory tracts. Other problems include headaches, stomachaches, dizziness, night blindness, leprosy, dermatitis and skin discorders. Leather dust can be carcinogenic and causes allergies, both of which represent a threat to the local population.

Research shows serious problems of such contamination in Korangi and Charsada (Industrial Estates). Along the Karachi coast, tanneries contribute 10-15 percent of the total pollution. In the Punjab, prime agricultural land is being contaminated and the crop yield adversely affected. Using an ARIMA model, I forecasted exports of leather and footwear based on past trends, and I drew on a World Bank forecast for the increase in cloth exports due to the Uruguay Round ATC and combined this with an ARIMA forecast of cloth exports to non-quota countries. Between 1996-97 and the end of 2004 cloth exports could be expected to rise by 45 percent and the corresponding increase in pollution load is calculated to be 81 percent. Leather exports are expected to decline so one can expect a 7 percent lower pollution load generated by leather tanning without mitigation measures. If mitigation measures are adopted, both in plant and external, up to 91percent of the emissions from cloth and 66 percent of the emissions from tanning could be reduced.

The costs of such measures in 1996-97 at a macro level would have been Rs. 2.598 billion for textile processing which amounts to 0.12 percent of GNP in 1996-97. The foreign exchange liability for this year would have amounted to Rs. 749.79 million or 1.6 percent of only cloth exports in 1996-97. More important, given government fiscal constraints, on a micro level the cost to industrialists for mitigation in a plant with a 21.45 million square meters production capacity would have been a maximum of Rs. 10.42 million or 1.6 percent of its sales revenue. For the leather industry, on a macro level the net mitigation cost (after subtracting the value of chromium recovery) in 1996-97 would have been 0.0048 percent of GNP and the mitigation cost to exporters of leather would have been 0.88 percent of their export revenue. These mitigation costs are even lower than for cloth reduction since clean production technology is locally available. In view of negative effects of pollution generated by these industries, as indicated in the preceding paragraphs, these mitigation costs seem modest indeed. This is contrary to a view expressed in the literature that the costs of establishing and operating clean technology are very high.

Our stakeholder dialogues indicate that currently industry is inadequately informed of the rapid developments on the trade and environment interface. There is little awareness about standard setting that is currently underway in the OECD or about how competitors are positioning themselves. Often the market provides such information, but it can be when it is too late as happened in the case of Pakistani exports of surgical goods and shrimps. Since information is a public good that confers positive externalities, the Ministry of Commerce, Environment and the Export Promotion Bureau should be proactive and invest resources in the relevant information generation. The private sector would have an incentive to restrict information dissemination to recover private costs rather than encourage wide dissemination to maximize social gain. This is a classic case for state provision.

A section dealing with trade and the environment in a larger WTO cell in the Ministry of Commerce, may work well. Such a cell could then work closely with the various Industry chambers and ensure Pakistan does not lose markets on account of non-compliance with environmental standards and gains green niche markets. The response of the Textile Committee of the Government of India to the ban in OECD countries on azo dies is particularly instructive.

The timing is very opportune for the government to work actively with industry and civil society to pursue an environmental and sustainable development agenda and at the same time reap the dividends of export promotion this will bring. The National Environmental Quality Standards (NEQS), which are part of the 1997 National Environmental Protection Act, are due for implementation next year. Industry has been involved in the process of standard setting, has agreed to paying a pollution change for pollution in excess of the NEQS via an enforceable process of self-monitoring (as in the case of taxation) and has even agreed to the amount of the charge. The Ministries of

Commerce, Industries and the Environment can strategically provide the necessary information as this process gets underway.

As earlier pointed out, cleaner production in Pakistan may mean more exports, but it also represents an important step in the direction of sustainable development that can be viewed to be about justice for current and future generations. While the impact of poverty on the environment is often mentioned, less attention is paid to the poverty inducing aspects of environmental degradation via a loss in access to resources for livelihood and a loss in health, productivity, working days and jobs.

4. Capacity Building – A Way Forward?

Clause 33 "recognizes" the need for capacity building for developing countries to deal with the trade and environment agenda. However, the language in the clause is indecisive for two reasons: first, it does not commit the North to actually providing the requisite capacity building support; and second, it does not enter into the complicated debate about what actually constitutes capacity building.

Nevertheless, about 30 WTO members pledged US$ 18 million to a new WTO technical assistance fund in March 2002, which is aimed at financing the bulk of the capacity building activities indicated in Doha. Members endorsed the technical assistance plan for 2002 in March, although developing countries insisted that the activities would be kept under constant review. About 500 activities, covering 22 issue areas (including trade and environment), are listed in the 2002 Coordinated WTO Technical Assistance Plan. The bulk of the activities are in the areas of services, implementation and Singapore issues.

The key feature of the Plan, following from Clause 33 of the Doha Declaration, is an enhanced focus on inter-agency collaboration, including the involvement of the UN and regional development banks, but still a heavy reliance on meetings and briefings. The emphasis within trade and environment capacity building, however, remains largely restricted to seminars, meetings and workshops, involving the UNEP and some MEAs. This is unlikely to be of much lasting value to the South.

The criticism leveled by a number of international agencies and most developing countries is that the Technical Assistance Plan for 2002 is an expression of the inability of the WTO Secretariat's ability to build capacity in a meaningful way. The Plan does, indeed, rely too heavily on one-off seminars, which have proven to be too general and ineffective, and has little of substance to offer to developing countries seeking to build capacity for sustainable development. Such one-off events, including irregular "training" sessions for governmental officials, have proven ineffective in the Pakistani context in various dimensions, including trade and environment. A serious effort at understanding the outcome of such "capacity building" is yet to take place, although the lack of impact is generally visible.

Many non-governmental organizations and trade delegates have instead called for the WTO to help build "policy capacity" within developing countries that can help to integrate international trade within larger development policies. However, such "broad-based" capacity building is not free of political implications. The following issues highlighted with regard to trade capacity building (Lecomte, 2001) are of particular relevance to Pakistan in trade and sustainable development:

1. **Risk of biased aid**: It is important to recognize that the interest of the North as donors are fundamentally interlaced with its interests as trading partners with the South in trade capacity building. There is, thus, the risk (and evidence) of capacity building being provided to meet commercial interests over development interests. The broader "donor agenda" debate in Pakistan has pointed this out in other fields as well. What is needed, clearly, is a self-designed, holistic agenda to prevent any third party from harming that agenda, whether through aid or otherwise. The problem of defining

an agenda for the South, and even for Pakistan alone, has proven to be a policy problem in the past, leaving open room for biases within capacity building to creep in.

2. **Donor coordination**: The evidence from Pakistan clearly supports global experience that donor coordination for aid generally, and for trade capacity building particularly, has been missing. Donor capacity to build further capacity itself, interestingly, is one of the prime concerns of developing countries.

3. **Comprehensiveness**: The absence of a holistic plan for integrating international trade into sustainable development policies is also evident. This stems partly from the lack of donor coordination, but mostly from the absence of such an agenda in developing countries, like Pakistan, themselves. As a result, there are enormous benefits in very limited, specific areas, but no overall progress. The ITC/WTO/UNCTAD Joint Integrated Technical Assistance Program for trade capacity building in Africa stands out among current initiatives as developing a holistic, process-oriented approach to counter the traditional project-oriented approach. Such initiatives, however, do not exist for Pakistan. The emerging aid and lending framework in Pakistan, the Poverty Reduction Strategy Paper being proposed by the World Bank and the Government of Pakistan, is not suitably tuned to either trade capacity building needs or to practical steps for sustainable development.

4. **Assessment**: Most trade (and other) capacity building is oriented towards tangible results; hence the emphasis on projects and seminars, rather than processes. This supports, and is strengthened by, the typical procedures by which capacity building is assessed: quantitative and output-oriented. However, as has been argued above, the needs of developing countries, especially Pakistan, do not match this approach. There is a need to refine the assessment methodology for capacity building to emphasize process and policy-oriented capacity building. Again, such a direction needs to be provided by developing countries themselves.

5. **Legitimacy**: Many donors are themselves struggling to reconcile trade and investment promotion programs with their own poverty alleviation initiatives. There is no doubt, then, that trade capacity building is faced with a problem of legitimacy when integrating with the overarching goals of sustainable development. Expecting enormous and immediate results in poverty alleviation from trade programs is, in any case, unrealistic. However, capacity building in trade and environment can contribute significantly to sustainable development goals if it is targeted at policy coherence.

Be that as it may, Clause 33 (combined with the weaker clause 51) offers an opening for Pakistan to help build its capacity for engaging with the WTO on trade and environment. However, the above section attempts to clarify the threats facing Pakistan as it uses this clause and the financial commitments made by the North. The principal factor in the debate is whether Pakistan can determine its own agenda, based on the goals of sustainable development, and use it to guide the coordination and orientation of capacity building initiatives. These lessons are evidenced by the history of capacity building in Pakistan, including the experience of the Green Revolution (Box 11), and the ETPI and TTSID programs (Box 12). The example of the Green Revolution, although believed to have been environmentally and socially harmful, provides valuable lessons

for capacity building in trade and sustainable development. The experience of ETPI and TTSID is less heartening, arguably because the same level of coordinated effort never took place in either initiative as it did in the case of the Green Revolution.

Box 11 – Capacity Building in Pakistan: Lessons from the Green Revolution

The **Green Revolution in Agriculture**, between the mid-1950s and early 1970s, led to a drastic increase in yields and productivities in several major crops including wheat, rice and cotton. However, it has arguably been harmful in environmental and social terms. Yet, the fact remains that technology that was in the hands of a few hundred scientists at most, was successfully transferred to millions of farmers, most of them illiterate, in the space of less than a decade. In this regard, it remains the leading example for capacity building in the country; it yields important lessons for capacity building, especially to tailor it to social and environmental goals. Green Revolution technology was based on the increase of agricultural yield through the introduction of high-yielding varieties of seed, chemical inputs and modern techniques. The technology relied on high-input farming, mechanization and excessive use of natural resources, principally water. Importantly, the technology required was generally not available in Pakistan, although Pakistan's domestic policy soon integrated the needs in the planning process.

The success of the technology is visible in its widespread adoption in small, medium and large farms throughout the country. The success was built on five inter-linked factors, mobilized roughly in unison to achieve the intended results:

- ✓ **Mobilization of economic incentives to the users (farmers)**: Ultimately, the Green Revolution was successful because the adoption of the new technology and practices was profitable for farmers. Indeed, the technology needed for adaptation to new techniques, inputs and knowledge create a short-term financial disincentive. This was overcome with massive subsidies, some by the providers of the technology (such as low-cost new seeds by seed corporations) and some by the government (such as subsidies to extract groundwater to fulfill the water-intensive requirements, or free or subsidized extension services).
- ✓ **Creation of a network of support institutions**: These ranged from supply outlets in the remotest areas (such as seed corporations, both public and private), through technical assistance (through government extension and private experts) to financing institutions (such as the Agricultural Development Bank and agricultural loans through private banks).
- ✓ **Re-orientation of research**: To ensure continuous adaptation of the technology to local conditions, government-led research centers were established or strengthened, and guided to undertake the requisite research and dissemination.
- ✓ **Mobilization of financial resources**: Quite apart from the financial incentives offered to users to adapt, the Green Revolution managed to mobilize a large volume of credit through regional and international development banks.
- ✓ **Integration within domestic development policy and planning**: Perhaps the single most important factor for the unprecedented and unparalleled achievement of the Green Revolution's goals was the manner in which domestic policy was aligned to contribute to the goals. Financial, investment, social development, industrial and research policy were all aligned with agricultural goals to benefit from the Green Revolution. To date, this is the only such example in Pakistan's domestic policy refining.

Box 12 – Capacity Building for Trade and Environment in Pakistan

Environmental Technology Program for Industry (ETPI): an environmental initiative taken by Federation of Pakistan Chambers of Commerce and Industry (FPCCI) and the industrial sector, with funding from the Netherlands Government. The goal of ETPI was to help Pakistani industries in identifying and implementing the most economic and pollution controlling technologies. The program comprised six major components: Data Base Development, Institutional Networking, Dissemination and Communication, Institutional Support and Training, Demonstration Projects, and Monitoring and Evaluation.

These components depict a comprehensive framework that facilitated the complex process of environmental change in industrial sector. Phase 1 of ETPI included the most polluting industrial sub-sectors identified by the NCS: Pulp and Paper; Cement; Sugar; Fertilizer; *and* Textile processing. The 14 industrial based sectors covered in phase 2 were; Petrochemicals; Industrial Chemicals; Pesticides and Insecticides; Dies and Pigments; Pharmaceuticals; Food Processing; Edible Oils and Fats; Dairy; Tobacco; Steel; Automobile; Polyester-Fiber and Yarn; Wool and Wool Processing; *and* Textile Spinning and Weaving.

Capacity building was initiated through the six components to integrate green technologies into the industrial sector. ETPI's main achievements include: raising awareness among industry, brought industry to actively participate on environmental forefront, setting up of Environmental cells and Demonstration Projects. Key deficiencies include: lack of its own advertising of what it can do for others, little involvement of research institutions and universities, and especially little interaction with other international agencies involved in environmental projects. Although sufficient funds were mobilized, there was no overall policy coherence and no nation-wide mobilization of institutions.

Technology Transfer for Sustainable Industrial Development (TTSID): The Sustainable Development Policy Institute (SDPI), with assistance from the Federal Office for Foreign Economic Affairs, Switzerland (FOFEA), initiated the program on market-based incentives for the environmental improvement in the industrial sector. The elements of TTSID included: establishment of innovative financial instruments, policy advice to government on environmental issues, development of an environmental monitoring program for the industry, environmental training services for the industrial sector, information and advisory services, and business-government round tables. TTSID provided support to industry and government for the promotion of policies and practices for sustainable industrial production through, business-government roundtables to facilitate regular consultations between the private sector and government on environmental issues. Supported by technical research, recommendations emerging from these consultations were used to provide advice to the government for the development and implementation of national environmental policy. Market based approach adopted by the program attracted industrialists to consider green technologies as cost reduction incentives.

Through the information and advisory services component, the project produced information packages on environmental issues for selected technology suppliers, and a database for the exchange of information. Finally, the project also developed proposals for innovative financial mechanisms for the establishment of green credit facilities for environmental projects in industry. The training component of TTSID developed training materials by conducting environmental studies in selected industrial sub-sectors followed by hands-on training and workshops. This component also provided support to industry in building measures, and in identification of end-of-pipe treatment options. Importantly, TTSID houses a voluntary self-monitoring and reporting initiative for industrial pollution levels. Although the program has been successful in meeting most its outputs, the lack of policy coherence at the national level (albeit more than in the case of ETPI) has meant that impact is limited.

The experience of the Green Revolution, ETPI and TTSID yield valuable lessons for Pakistan to pro-actively define capacity building in its context:

Long-term: a long-term vision is needed within which short-term, one-off or stand-alone events and projects may fit in. Without such a long-term view, the sum of a number of short-term events does not add up, but rather results in zero impact. Taking a long-term view necessitates a pro-active vision, and the definition of activities that can

contribute to it. In addition, the long-term view brings into play the **need for scale**, which the Green Revolution managed to reach but ETPI and TTSID both could not.

Policy integration: Stand-alone events and activities are useless to build capacity. They must fit in with a conducive policy. While the Green Revolution provides one positive example of this, negative examples abound, from the National Conservation Strategy to TTSID and the application of NEQS to the push for food security.

Market-based incentives: Reliance on purely supply-side interventions has been a hallmark of capacity building in Pakistan, resulting in almost complete failure to sustain activities. The Green Revolution, on the other hand, created a financial incentive for end-users (farmers) by making the technology (High-Yielding Variety seeds and chemical inputs) cheap through a diminishing series of subsidies. TTSID attempted to do the same with NEQS application but could not succeed. Few other initiatives can be pointed which have developed a market for capacity building measures in trade and sustainable development.

Creation and mobilization of institutions, including research: With minor exceptions, there has been little creation of new institutions and mobilization of existing institutions towards a single policy goal. This has been, to a large extent, due to the absence of unifying vision, but where such a vision existed it has not been institutionalized. Research, in particular, has suffered. The research currently underway in most institutions is almost completely irrelevant to societal needs, particularly in the wake of emerging global trends.

Mobilization of financial support on own terms: Once again, it is only a pro-active vision that can determine the demands for financial support, either from within the country or from the North. In the absence of such a vision, the country has been largely reliant on donor grants according to donor agenda. This has resulted in different directions of capacity building, as donor coordination has typically been a major problem. Even in cases where there is a strong felt need by a number of stakeholders, there is little pro-active seeking of support.

Flexible and process-related: It is being found that the "knowledge-based economy" requires adaptability of fast-changing global circumstances. As such, it is not the latest technology itself that is at a premium, but rather the ability to understand and develop such technology in advance. To ensure this, capacity building must focus not so much on the transfer of technology "hardware" but rather technology "software", or the ability to develop and disseminate hardware. This perspective requires a paradigm shift from past capacity building efforts, particularly when combined with a need to develop process-related capacity, rather than substance-related capacity. The former requires the development of emerging skills, such as negotiations, conflict management, policy formulation, stakeholder convening, and so on, that can encourage widespread capacity building.

5. Recommendations: Headlights in the Haze

The above explanation of the Doha Declaration's Clauses on Trade and Environment, within the context of the WTO-MEA relationship, leads to a complex picture. While what is needed is a sustained attempt by Pakistan to develop macro-policy coherence over time, some direction can immediately be provided in light of the above.

Two fundamentally distinct types of recommendations are worth describing: process-oriented and substantive. Both sets of recommendations arise from one overriding principle, that neither enhanced international trade not environmental conservation are goals by themselves – Pakistan's overriding concern is sustainable development, and all policies and actions need to support that goal.

5.1 Sustainable Development: The Center of Gravity

The fundamental issue is that Pakistan's ultimate policy goal needs to be defined with greater clarity, keeping in view the challenges as well as the opportunities provided by the global system. We have argued in some detail that engagement in the trade discussions on the basis of a single dimension, namely market access, is neither desirable nor valuable. Pakistan needs to assess the potential for economic growth and sustained development, both in terms of the most fruitful opportunities for producers, and the most promising stance for building coalitions and attracting support as well as investment.

The principle issue that emerges from an understanding of the Doha Declaration, MEA and WTO linkages and other developmental efforts of Pakistan is the need to develop an indigenous agenda around which to orient all other policies and actions. First, building upon the existing policy stance, this agenda must include economic growth, but it has to be based on a renewed understanding of the basis of economic growth in a knowledge-based economy. Second, given the predominance of poverty in Pakistan, it has to give centrality to poverty eradication and the protection of the vulnerable. Third, given the ethical nature of commitments given at the global level, and also the rapidly expanding degree of environmental degradation in the country, it has to include the environment.

The broad approach of sustainable development is particularly well suited to bridge trade and environment concerns, as well as to build a policy community[7] to achieve the goals.

[7] A policy community is defined by Banuri and Khan (2000) as a network of individuals and institutions with interest and expertise, and therefore a stake in the process of decision-making, in a particular area. It is based on the idea that policy-making is not a monolithic exercise located in one ministry or agency, but involves cooperation between distinct government agencies, as well as with non-governmental entities: NGOs, media, business, academia, etc. The decision-making process invariably reflects the relative political influence of these groups and involves political negotiations and compromises between them.

Operationally, this has three dimensions:

1. A process needs to be initiated to develop a consistent, comprehensive and indigenous sustainable development policy framework. The National Conservation attempted to provide exactly this, but did not succeed (Hanson et al, 2000). The next generation of an NCS is being planned, but it is unclear how that would evolve, whether it would be as broad as is being contemplated here, and whether it would have the centrality required (such as is being accorded to the Poverty Reduction Strategy Paper). The biggest success of the NCS, however, does offer a useful lesson in developing a participatory, inclusive and continuously evolving process for national policy formulation. However, what the NCS did not do adequately is to integrate the perspective of globalization, particularly from the point of view of international trade and environment. Furthermore, a new policy process must also be well integrated with all policy dimensions, including finance, domestic and foreign security, international relations and social development.
2. As it evolves, such an integrated policy framework can guide the development of institutional and legislative mechanisms to support it. This, again in contrast to the past, must incorporate realistic responsibilities for multilateral commitments and should aim at involving different sets of stakeholders at multiple levels. Of key importance is the temporal order of this sequence: first a policy framework, then legislation and then support institutions.
3. If freer and fairer trade is to lead to real benefits, particularly with regard to sustainable development indicators, a sustainable development policy framework must be focused on creating the conditions conducive to such an impact. This means that the framework must tie in, and to an extent guide, developments in governance, human resource, productive infrastructure and the generation of knowledge. International trade is of particular relevance to such a framework, as it provides a necessary window onto the process of globalization, which needs to be understood more thoroughly. However, by integrating within itself the perspective of globalization, such a framework is naturally suited to be a central point for other policy areas.

The experience of many countries is that the formulation of such macro policy frameworks is a capacity development process in itself. More importantly, it provides a nation with an agenda on which to negotiate in the era of shifting alliances within global politics. The purpose of making this recommendation here is to emphasize the importance of a guiding principle for Pakistan as it engages in the trade and sustainable development debate, as well as to lay the seeds for the initiation of such a massive undertaking.

5.2 Pakistan's Position on WTO-MEA Linkages

As has been argued throughout this thesis, Pakistan's consistent position to prevent any progress in the trade and environmental arena is simply not feasible any more. Holding to the position is likely to lead to a loss of credibility in other negotiations and to missing out on possible capacity building while there is time.

While some of these tensions between WTO and MEAs open up possibilities for leverage in negotiations, the prime issue is that Pakistan needs to gear up to meet requirements in either regime. At the global level, Pakistan needs to ensure that the unification of both regimes leads to outcomes that are conducive to sustainable development. This is already the position of many developing countries and a support network of international organizations (both governmental and non-governmental). The way to ensure that is through:

- **Word games**: lobbying for language in all WTO texts, Committee decisions and MEA Conferences of Parties that is actively in support of SD;
- **Coalition building**: leading a Southern process to define sustainable development from a Southern perspective, and make that the basis for Southern negotiations at the WTO. The Development Box proposal, led (among others) by Pakistan, Kenya and the Dominican Republic and the Food Security Box proposal advocated by India are examples of such processes, although neither met with much success in Doha;
- **Information flows**: There is a general sentiment in all quarters that the lack of regular information exchange between MEAs and WTO secretariats and the WTO Dispute Resolution mechanism is a leading gap. Both formal and informal information exchange is being widely advocated, and the Committee on Trade and Environment has recognized this as a key concern, and the meeting of the CTE on June 11 – 14, 2002 is expected to include an information session with some MEA Secretariats. Pakistan itself can support such information exchanges, and develop domestic mechanisms for the same.

It is unclear whether Pakistan should take definitive positions on the finer points of institutional harmonization at just this stage prior to negotiations. The question of whether environment-trade disputes will be held in the WTO Dispute Resolution mechanism or through the more diffuse MEA mechanisms is certainly relevant to the broader debate. However, without a broad sustainable development framework at the center of Pakistani policy, and without any significant assessment of international trade trends and WTO on Pakistan, taking a position on such issues would be premature. What can be done forthwith is for Pakistan to take a position that any issue arising in MEA-WTO linkages will be dealt with on a case-by-case basis, keeping sustainable development imperatives at the forefront. This will immediately remove the negative impact of blanket positions.

5.3 Recommendations for Future Trade Policy of Pakistan

As mentioned in the introduction, the positions that Pakistan could take internationally need to be supported by strategies at the national and provincial levels in order to ensure that sustainable development objectives are met, through binding trade and environment issues.

An internal Pakistani position

The following points summarize the elements that Pakistan could include in a sustainable development framework to ensure that trade and environment issues are addressed:

- Following the turtle excluder device case that Pakistan and other Pacific Rim countries won against the U.S. and their environmental lobby; almost all of the fishermen within the shrimp industry are installing turtle excluder devices in their catch nets. This interesting contradiction necessitates an examination of the possible elements of such a precedent and its real outcome. This makes the impact that case law has on real market behavior questionable.
- What institutional elements are required to facilitate our industries installation of environmentally sound technology? Are we simply Research in the areas of increasing exports of leather and textiles produced data that suggested that costs are extremely low in implementing mitigation measures. Real cost data must be generated at the sector level to communicate whether or not mitigation cots are absorbable or not. Mitigation costs are absorbable or not.
- Only in the non-availability of incentives for environmentally friendly behavior should government, embark on command and control type of mechanisms. Market based instruments have been proven to work better in contemporary regulatory frameworks as compared to the more adversarial, state structures of the past. Incentives need to be instituted locally and for imports to drive industry towards sustainable technology and address the higher increases in dirty industries in developing countries as compared to those in developed countries. The creation of a segregated tariff structure that favors environmentally friendly imports and technologies could curb the growing number of dirty technologies and industries within Pakistan. Such an offsetting factor would be useful as a lot of inefficiency, generated by a highly protective trade regime, has increased the use of dirty technologies in industrial and energy production in Pakistan. Furthermore, high duties in the past have resulted in old vehicles being retained with adverse impacts on pollution.
- Research, advocacy and networking within the sphere of environmental research and technology needs to take place to identify whether we are capable of protecting our environment with local means, as per the commitments and goals outlined in the NCS, or whether we really need technical assistance. A hybrid research and networking institute could serve as a hub for industrialists (expert market concerns), resource experts (all sectors), NGOs (collaborative research, long term monitoring) and government representatives (Ministry of Commerce, Ministry of Environment, Ministry Economics, Ministry of Agriculture) to collaborate, generate and assess options that utilize best available environmental

technologies in responding to trade and environment issues close to the ground. This inter governmental agency/body could also monitor the database recommended by the CTE and inform and disseminate information to policy makers and affected industries before grace periods expire and market access is threatened.

- Implement layers of local laws and policies that will protect Pakistan's farmers, indigenous trades (especially the vulnerable and informal SMEs) and the environment from bio piracy and unsustainable development of the agricultural sector by MNCs and TNCs.
- Encourage industrial participation and awareness as a whole, especially with respect to export led growth. Identify firms in sectors that are large enough to register their internal management systems to the ISO 14,000 standards and congruently, identify growth constraints that when removed, will allow for increased revenue to offset registration cots. Insist on financial and technical assistance to develop our own internationally recognized body for certification.

An External position

The following positions need to be articulated by Pakistan and like-minded nations at the next WTO ministerial.

- There is, naturally, a need to monitor and manage these issues on a global scale, independent of a trade related forum. This lends credibility to be suggestion made by David Runnals, the President of the International Institute for Sustainable Development, that a World Environment Association be set up to create and manage Multi Lateral Environmental Agreements and take ownership of linkages.
- As transpired in an NGO organized session at UNCTAD X, there is much disagreement between NGOs of the North and south on the issue of linking trade and environment as well as labour standards to the WTO. Thee is consensus however, that such issues need to be left to expert organizations that have been working on them for some time, namely the ILO, UNEP/UNCTAD and others.
- Pakistan's sovereign organizations (Government organizations, Inter Government Organizations NGOs), that are active in international networks, need to engage their counterparts in the North and make them aware of southern positions and effects that linkages will have closer to the ground. Ideally, cooperation and collaboration between Northern and Southern NGOs could result in alternative mechanism that could promote sustainable development without hindering Southern development. Pakistan should engage developing nations with similar interests in discussions to formulate specific proposals and positions to advance their objectives. Such a tactic should be pursued modeled in South Asia through the sharing of resources and encouragement of dialogue between different partners both in the public and NGO sectors. This will ensure more coordinated and better thought out positions during negotiations. A tactic that might result from such unity may be to encourage a system of 'proxy votes' so that countries

may transfer their voting power to likeminded countries. This will ensure inclusion of poorer, resource strapped nations in negotiations where if they cannot be present, their vote will at least count.

- At the holistic level, Pakistan should support politics that will reduce the WTO to the level of another global institution (without broad sweeping powers) and make it accountable to its member countries. Any WTO trade and environment related action should be used as a last resort (although we would not want it used at all) and must be supported by adequate MEA based research (UNEP/UNCTAD sponsored).
- Pakistan should lobby for clauses and rules that will ensure that any future trade and environment related work of the CTE will involve participation from all countries with effective participation coming from nations belonging to different geographical biomes and regions at different stages of economic and social development.
- The CTE must arrive at a clear and distinct separation of what constitutes a multilateral action in the framework of an MEA and from unilateral or plurilateral action. Paragraph 174 as a whole needs to be clarified and monitored, to assure that the relationship between WTO provisions, the Multilateral Trading System (MTS) and the MEAs are not in conflict and do not serve as protectionist barriers. The necessity for tests to monitor the impact of environment measures on trade needs to be given to UNCTAD/UNEP like forums (follow the example in paragraph 176). Furthermore, such information should lead to the use of a principle of subsidiarity whereby the lowest jurisdictional level of action consistent with effectiveness should be given authority.
- The precautionary principle within the WTO context requires some work. Specific concerns that Pakistan should express include the following:
    - When do WTO rules have an impact on domestic regulation? We need a proper balance between trade and precautionary disciplines. To what extent are dispute panels in the future going to be prepared to look inside the national regulatory process? The best approach should lie with the 'deference principle', i.e. In the idea that the WTO should accord deference to the policy choices of its members and especially take into account the capabilities of the developing nations.
    - The link between the rules of the multilateral trading system and general principles of international law needs to be examined. In this instance, the issue is to what extent the WTO rules and dispute settlement should take the precautionary principle into account on the basis that it has become a general principle of international law.
    - Mandatory eco labeling, PPM based restrictions and other exclusionary devices should not be imposed on resource strapped Southern economies as this would hinder the developing efforts of firms and of course, stall the efforts at recovery by sick firms. Life Cycle Assessment expertise does not lie within the CTE's mandate. Eco-labeling, while being linked to consumer awareness, may have trade effects that should be monitored. Where is eco-labeling beneficial? What is its market potential and what are the potential trade effects?

- A multilateral fund should be created on the lines under the Montreal Protocol for helping developing and least developed countries to acquire clean, environmentally sound (patented) technologies and practices (in accordance with Agenda 21 provisions).
- Oppose any attempt to amend Article XX of the GATT to incorporate a specific "environment window" for taking unilateral trade measures to protect domestic environment, which may act as "disguised protectionism". This has particular implications for exports in textiles.
- The issue of Bio Piracy needs to be addressed to protect indigenous farmers and traditional knowledge from MNCs that wish to patent such knowledge, both in the local market and internationally.
- There should be attempts to make the notification procedures for setting international standards for goods and services more transparent so that developing and least developed countries' exports are compatible with international standards, and compliance processes can be made easier.
- Developing countries should provide zero tariff access to all products produced by LDCs. It should also be complemented by technical assistance, whose funds could assist in:
    - Linking trade promotion activities to the environment
    - Providing training for environmental impact assessment
    - Cooperation among producers to attain economies of scale and access to technology
    - Increasing consumer awareness, tied to specific industry efforts on sustainable industrial development.
- Developed countries have not been taking seriously their commitments made under the heading of Special and Differential Treatment (SDT) at the time of signing the Marrakesh Declaration. A stock taking exercise needs to be taken during the third ministerial conference. In addition, a clause/understanding needs to be included so that no 'strings or future concessions' are attached to SDT, a stand-alone issue/s, as is being implied in the statements made in Seattle. The link between market access, environmental degradation and poverty needs to be emphasized in making a stronger case for increased market access to generate funds for environmental protection.
- Trade and environment is a sophisticated issue whose impacts and distortions will differ from country to country and region to region. In order to address environmental issues without incurring adverse effects on trade, policies need to be premised on individual study and work at the local level by export organizations (UNCTAD/UNEP). Such a forum should also be empowered with a dispute settlement mechanism to remedy concerns.
- Pursuing a ' phased negotiation' strategy (Najam, 1999) will allow the South, especially with respect to trade and environment issues, to monitor implementation of agreements with expertise, close to the ground, and identify such negative impacts before their effects become service. In order for such a shift in mentality, the North needs to drop the traditional sanctions based theory of inducing change.

- Developed countries should exercise voluntary restraint on dumping of domestically prohibited goods and toxic substances in the developing countries and LDCs. They should not shift or relocate their dirty industries in to developing and least developed countries, taking advantage of the pollution haven.
- There needs to be more emphasis placed on the superior degree of sustainability that is achieved with traditional, labour intensive, indigenous business; rather than with modernized, capital intensive industry. Environmental economics and ecological 'foot printing' has proven time and time again that the more labor intensive and seemingly more polluting industries of the south are relatively more sustainable on a total cost scale than the high technology, capital intensive and 'green marketed' industries of the North. Capital intensive ventures, through their sophisticated and increased use of technology use of technology use more raw materials, manufacturing process and is much more environmentally harmful than labor powered ventures within the developing world as the costs of raw material, manufacturing process, energy supply and depreciation generated by machinery and technology incur significant and yet hidden cots to the environment. Furthermore, such ventures displace labor driven production (as cost distortions do not take into account full environmental costs). For example, green economists had discussed repeatedly, that if the world's fishing fleets were modeled after those in Japan; and if the world's agriculturalist were to follow the capital-intensive farming taking place in Ohio or Nebraska; resource depletion would accelerate by many fold. If developing countries can successfully articulate this, then the marketing implications, labeling benefits and market access on a global scale will have a significantly positive impact on sustainable development for both the developing world and the developed world. This will build a case for organizing clusters of SMEs and making their export packages more attractive while reducing their mitigation costs. One aspect that is continuously missed from any debate on PPMs and Lifecycle assessment (LCAs), is the total environmental costs of comparing Northern vs. Southern industries. Essentially, a sector oriented, case by case approach needs to be taken on each issue, without raising barriers or restricting the development of Southern markets.
- Push for the elevation of the research and capacity building focused UNEP/UNCTAD joint project to a policy influencing capacity and emphasized the need to have indigenous and traditional farming (with small ecological footprints) given special treatment and 'credits' for having little impact. Such mechanisms need to be employed in order to encourage SMEs to stay simple and sustainable, rather than unnecessarily make capitalization and a shift towards high tech seem profitable. Also, placing more authority within a UNEP/UNCTAD research vehicle will encourage a country by country approach to environment and trade; giving developing nations with a little more leverage.
- Developed countries should make arrangement to transfer environmentally sound technologies to the developing countries and LDCs, and go beyond rhetoric. Developed countries should offer technical assistance to the developing countries and LDCs to help them building the capacity of their officials as well as entrepreneurs to deal with the issues of trade and environment more effectively.

- ** The heart of the issue is that how to socialize a competitive economy which pitches company against company and workers against workers and country against country. A regional approach to solving this problem and balancing the good with the bad of a socialized free market economy may be extended to the global level**.

Conclusion

Pakistan should support and promote the suggestion made by David Runnals of IISD to create a World Environment Association (perhaps in collaboration with the special project recently launched at UNCTAD X between UNCTAD and UNEP) that will manage, oversee and serve as a forum for multilateral environmental agreements.

Traditional command and control type of, sanctions based instruments may work in developed markets for industries that have the capacity to embrace and adopt environmentally sound technologies, but not in developing countries. The lack of resources in poorer economies needs to be taken into consideration during WTO negotiations to ensure that any more barriers or hindrances to the development of Southern market capacities and capabilities are not erected through trade and environment policies.

There is a need to bring the NCS into line with trade and environment related standards that will continue to be pushed on developing nations in exchange for market access. In order to clarify and activate the strategy, the environmental potential of government, industry and civil society need to be addressed, jointly and co-operatively.

Eco labeling has taken up so much time on the agenda that other issues that needed to come into play (standards, and technical regulations, packaging, labeling and recycling among others) have been ignored.

Pakistan, along with other Southern negotiators, must focus on how to:

- Embody the linkages between trade, environment, development, poverty and environmental degradation.
- Replace the correlation between environmental protection and liberalization.
- Design mechanisms that will:
    - Ensure environmental benefits,
    - Complement trade liberalization with safeguard market access,
    - Encourage import of environmentally sound technologies, finance and capacity building,
    - Exclude and reject disguised protectionism while emphasizing better living standards, social awareness and environmental technology.

In achieving such broad goals, Southern negotiators can draw strength from the positive data that has been accumulated thus far from UNEP country based studies on integrating sustainable development objectives into developing economies:

- Full resource valuation, full cost pricing of resources, and the use of market based instruments needs to be maintained and expanded along with a mix of standardizing.
- Economic valuation, and full cost pricing of natural resources has proven to be successful in a number of cases. Each country situation is different and designs of instrumentation need to also be made different.
- Awareness among decision makers, country ownership with wide stakeholder participation, endogenous problem identification and policy formulation, strengthened in country expertise and capacity, and integration and 'learning by doing' are essential for successful sustainable development integration.

The debate up until now within the CTE has demonstrated the built in inequities and the inherent imbalances in dealing with environmental issues. There is a need to ensure that the Southern environmental agenda is brought into the discourse. This position should place the trade and environment discourse within the broader framework of sustainable livelihoods, poverty alleviation, social and environmental justice, and the expansion of ecological and human security. The onus for such a position in Pakistan lies with Government, scholars and policy oriented NGOs.

The Future is a Winding Road…

The Doha Declaration, and in particular Articles 31 through 33, mark a significant turn around a global corner: environment can no longer be separated from the international trade agenda. Future negotiations will focus on exactly this issue, representing both threats and opportunities for the South.

While it is unclear where exactly this turn will lead to, particularly when combined with non-WTO trends – such as consumer pressure – it is clear that Southern countries including Pakistan need to start defining their agenda pro-actively. Sustainable development can provide the foundation for such a pro-active agenda, based on which new negotiating positions can be evolved internationally and new policy steps taken domestically.

In view of the broad-based nature of this study, it is quite likely that the next step needs to be a translation of this prescription into policy. However, the research study has gone to some length to point out the futility of one-off prescriptions or events; instead what is called for is a process approach to building flexible capacity to engage in the brave new world.

Three future-oriented actions may be stressed:

1. Immediately initiate a long-term, dynamic process of research, focusing on the impact assessment of trade liberalization and WTO requirements in the three dimensions outlined earlier.
2. Initiate a process involving civil society and the private sector, possibly through the WTO Cell Working Group mechanism, on defining negotiating positions.
3. Facilitate a long-term research process for unpacking "sustainable development" in the context of international trade for Pakistan, resulting in clear policy actions.

These steps are expected to enable Pakistan to deal with the knowledge-divide that is both a threat and an opportunity to its economy. In a one-way street, Pakistan can choose to make itself more competitive or stand aside. The choice, as always, is ours…

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